


Household Hints

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Household Hints

Over Two Thousand Useful and Economic Hints for the Home and Parents. Classified for ready reference, making easy the work of the Housekeeper.

Special Los Angeles Edition

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CALVERT WILSON

340 WILCOX BUILDING
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PREFACE

This book is intended to be a ready reference book for the housekeeper in her everyday routine of managing a house and caring for children.

It does not contain any cooking recipes, as that is a field in itself and there are a great many books on that subject on the market already. The author does not know a book like this where there has been gathered together so large a number of hints or directions useful daily to the housewife.

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Accidents and Poisons

GENERAL ADVICE.

Keep a supply of surgical gauze, absorbent cotton, adhesive plaster, prepared bandages, iodine, alcohol and peroxide of hydrogen and small scissors in a convenient place.

Poison Oak and Ivy.

Sponge frequently with a mixture of lime water and sweet spirits of nitre, or alcohol, or cover with vinegar thickly mixed with gunpowder.

Keeping Poisons.

Put all poisons, plainly marked in one spot and make that spot almost inaccessible, and don't keep half used up old bottles of medicine lying around as time may make them dangerous. Keep poisons in locked chest or tie bell around them.

Poisoning from Plants.

Use at once an emetic that will produce prompt vomiting. Salt warm water or warm soap suds are good. If you have nothing else push the finger as far down the throat as possible several times as this will cause vomiting.

Antidotes for Poisons.

First—Send for a physician.

Second—Induce vomiting, by tickling throat with feather or finger; drinking hot water or strong mustard and water. Swallow sweet oil or whites of eggs.

Acids are antidotes for Alkalies, and vice versa.

Acids—[Muriatic, Oxalic, Acetic, Sulphuric (Oil of Vitriol), Nitric (Aqua Fortis)]. Use soap-suds, magnesia, lime water.

Prussic Acid—Use Ammonia in water. Dash water in face.

Carbolic Acid—Use flour and water, mucilaginous drinks.

Alkalies—[Potash, Lye, Hartshorn, Ammonia]. Use Vinegar or lemon juice in water.

Arsenic—[Rat Poison, Paris Green]. Use milk, raw eggs, sweet oil, lime water, flour and water.

Bug Poison—[Lead, Saltpetre, Corrosive Sublimate, Sugar of Lead, Blue Vitrol]. Use whites of eggs, or milk in large doses.

Chlorform—[Chloral, Ether]. Dash cold water on head and chest. Induce artificial respiration.

Carbonate of Soda—[Copperas, Cobalt]. Use soap suds and mucilaginous drinks.

Iodine—[Antimony, Tartar Emetic]. Use starch and water astringent infusions. Strong tea.

Mercury and its Salts—Use white of eggs, milk, mucilages.

Opium—[Morphine, Laudanum, Paregoric, Soothing Powders or Syrups]. Use strong coffee, hot bath. Keep awake and moving at any cost.

Poisoned Wounds.

Suck poisoned wounds unless your mouth is sore; enlarge wounds, or what is better, cut out the parts without delay; hold the wounded part as long as can be borne to a hot coal or end of a cigar.

In Case of Fire.

Smother fire with carpets, etc; Before passing through smoke, take long breath, then stoop low, but if carbonic acid gas is suspected, walk erect.

For Burning Kerosene.

Wheaten flour is the best extinguisher to throw over a fire caused by the spilling and igniting of kerosene.

BLEEDING.**Bleeding Cuts.**

Bind around cut a cloth soaked in lemon juice, or apply ground flour or rice to the cut.

Bleeding Artery or Vein.

If an artery is cut compress above the wound and if a vein is cut compress below the vein.

Bleeding Tooth.

Put ice in the cavity or a plug of cotton held tightly by closing jaws. If not successful, saturate cotton in strong solution of alum or salt.

Bleeding from Lungs.

Lay patient down with head and shoulders elevated and supported. Keep him absolutely quiet in a cool, darkened room if possible. Give small pieces of cracked ice. Also small portions of salt mixed with vinegar.

Place cold wet clothes on chest, but keep rest of body warm. Give no stimulants.

Nose Bleed.

Lay patient on back and raise arms above the head. Put feet in hot water. Apply ice or cold water to the forehead, nose and back of neck. Press the nostril with the apposite hand. Snuff a solution of salt and water or alum and water (one teaspoon to a pint of water). If above fails stuff strip of surgical gauze or cotton into nostril tightly pushing well back and breath through mouth. Do not blow nose for several hours.

Causes of Bleeding.

New growths, high blood pressure, as in hardening of the arteries, Bright's disease and enlargement of the heart, ulceration of the nasal septum, tardy circulation in the veins in chronic heart and liver diseases, scurvy, pernicious anemia, the initial stage of typhoid fever, and hemophilia (a condition observed in "bleeders," whose blood does not clot like that of normal persons).

Bleeding Dont's.

Don't use lukewarm water to stop bleeding—it only increases it. Use either ice, ice-cold water or water as hot as can be borne.

Don't apply cobwebs, tobacco, mud or other styptics to stop bleeding.

Don't give stimulants to bleeding patients.

Don't put bare fingers into a bleeding wound.

Don't keep tight bandages applied longer than necessary.

Don't apply any dressing or bandage except such surgically clean.

BURNS.**Light Burns.**

Apply a solution of common baking powder (Sodium bicarbonate) made by dissolving in water as much baking powder as the water will take up. Cover with a clean gauze cloth or coat with mucilage and smarting will soon cease.

If the burn is deep, cover with a paste of cold water, flour and yolk of an egg, not allowing the paste to get dry until the smarting ceases: Or apply equal parts linseed oil and lime-water mixed.

Molasses applied where the skin is not broken will prevent the burn from blistering.

Laundry soap rubbed over the burn will sometimes relieve.

A mixture of varnish and lime-water rubbed into oil until creamy is a good remedy.

One remedy is to apply liberally the white of an egg, giving the burn two or three coats as this will shut out the air and relieve the suffering.

Raw potato scraped and applied to the burn will relieve and prevent a scar.

By putting a little flour into the frying pan of hot grease before beginning to fry food will act as a preventive to your being burned.

Severe Burns.

Severe Burns—Remove clothing by ripping up seams and cutting away; if clothing sticks around burned part, wet with warm water or oil. When extensive, quickly dress a little at a time; exclude air by covering surfaces.

Remove patient to a cool place, apply sweet oil, carbolized petrolatum, lard, olive oil or carron oil (equal parts of linseed oil and lime water), vaseline or white of an egg.

In absence of oils, dust burned parts with starch or flour. If nothing else is at hand use moistened earth or clay.

Get burns covered as quickly as possible. The best means of applying oils is to dip the gauze cloth into the oil and lay it upon the burned surface. Vaseline or other grease should be spread thickly upon the gauze.

Then cover the gauze dressing with layers of cotton and bind

all loosely with triangular or ribbon bandage. Shock usually accompanies severe burns and should be treated accordingly.

For scalded mouth or throat—Apply either of the oils or white of egg by drinking them.

Treat burns from gun-powder and electricity the same as ordinary burns.

If clothing catches fire—Throw person down, wrap him in a rug, coat or shawl, roll him on the floor until flames are extinguished.

For burns from caustic lye or strong ammonia—Flood with water, then with vinegar and then treat as if burned by fire.

For burns from acid—Flood with water and wash with a solution of baking soda.

For lime in the eyes—Flood with water and bathe with diluted vinegar or lemon juice.

For sun burns—Cover with baking soda, vaseline or oil, bind with cloth.

Burns and Scalds.

Carry patient to a place of safety. If severe send for surgeon. Remove clothing from burns. Let the water out of blisters by piercing them low on side with point of needle that has been passed several times through a flame or washed in antiseptic solution. Cover burns to exclude air. Never hold a burn to heat.

BITES AND STINGS.

Bee Stings.

Apply alkaline antiseptic solution of ice water— $1\frac{1}{2}$ pint, bicarbonate of soda—2 teaspoonfuls or bind on a paste of earth and water or reduce ammonia one-half and apply to the sting.

Dog Bite.

Mix salt with a little more vinegar. Wash the wound with it and keep a rag saturated with it on the wound.

Snake Bite.

A mixture composed of the yolk of an egg and salt will be found extremely beneficial if applied to the bite as one would a mustard plaster.

Prevent Infections from Bites and Stings.

Slices of lemon are used to poultice poisonous bites and stings, caused by snakes or beetles, by allaying the irritation and preventing any infections.

Stings of Insects.

Remove the sting if possible. Diluted vinegar, ammonia, alcohol or cologne water applied to the wound will give much relief.

Apply freely spirits of ammonia as strong as the skin will bear. Of great service in sting of yellow jackets, hornets and

spiders. Bee sting should be extracted before applying ammonia.

Bites and stings may be bathed in a strong solution of baking soda, or ammonia and water.

Extract of witch hazel, diluted with one-half water or even a little stronger, is useful.

To cure sting from wasp or garden snake which crawls on black currant or raspberry bushes. Immediately get some fresh mold from garden, moisten, if possible, with water, and apply to the injured part.

. Domestic Emergencies.

The suggestion which follow are confined to simple measures which do not require the use of drugs. They mainly touch upon emergencies which arise in the household when medical assistance cannot be immediately procured. In all emergencies the first thing to do is to send for a physician.

Fever—Undress the person and put him to bed. Do not cover up too warm; he will be more comfortable with a moderate amount of covering. Give cooling drinks; nothing to eat, except milk. Bathing with moderately cool water will give slight relief.

Colic or Cholera Morbus—Apply heat in the form of hot-water bags, bottles or hot plates and mustard plaster over the seat of pain. Hot baths are sometimes useful.

Diarrhea—Dysentery—For simple Diarrhea, ginger tea, peppermint or other warm drink will usually bring relief. A tablespoonful of sweet oil for an adult, or teaspoonful for a child will relieve irritation. For dysentery, which follows diarrhea, rest in bed, hot compresses, or mustard plasters applied to the abdomen and soles of feet will bring relief.

Vomiting—Patient should always lie down. Give large amounts of hot water, as hot as can be taken. Small bits of ice held in the mouth or swallowed, or a lump of ice held against the pit of the stomach, will sometimes bring relief. When other means fail, apply a mustard plaster to the pit of the stomach.

Hiccough—In severe attacks apply mustard plasters over the stomach. Hot vinegar, brandy or whiskey applied in the same manner will sometimes bring relief. Let the patient draw a deep breath and hold it as long as possible. Seven swallows of water without breathing is good.

Croup—In sudden attacks, playing with a toy or listening to a story may cause symptoms to disappear. Keep the room warm and have water boiling in such a way that the steam will reach the sufferer. Apply flannels wrung out in hot water to the throat and cover with some waterproof material. Use mustard plaster on the soles of the feet and chest (for a few moments only). Apply hot foot baths; if no relief, try

cold. In the membranous croup, slack lime in the room, allowing the patient to inhale. Never neglect to summon a physician.

Hernia Strangulation—Place the patient on his back in bed; elevate the foot of the bed about twelve inches; bend the legs back toward the abdomen. Apply to the hernia towels or cloths rung out in hot water; if these do not bring relief, apply cold. Get a physician immediately.

Cramps.—Bathe the part in water as hot as can be borne; apply mustard plaster to the part affected, and to the extremities.

Suppression of Urine—Apply hot cloths over the bladder; give a warm sitz bath. Walking over a cold, wet floor or dashing cold water on the legs and thighs will often bring relief.

Nervousness—Put the patient to bed; give hot drinks, especially coffee; apply heat or mustard to soles of feet, back and chest.

Neuralgia—Apply a mustard plaster or hot cloths over the seat of pain. If hot applications fail to relieve, apply cold.

Earache—Apply cloths wrung out of hot water to the head or near the seat of pain. A hot poultice is useful. Give hot drinks. Moisten a bit of cotton with sweet oil and laudanum and put it in the ear.

MISCELLANEOUS.

How to Prevent Blood Poisoning.

When you have a cut, a scratch, a bruise or any other kind of injury, paint it with iodine. As soon as injured dip a tooth pick with cotton rolled on the end of it in the iodine and paint over the wound without washing. The iodine will kill all germs in the dirt that gets into the wound, while washing only drives the germs farther into the flesh. When painted with the iodine, wrap the injured part in a clean cloth for a couple of days and protect it from further infection. Iodine is preferable to alcohol, carbolic acid and peroxide of hydrogen, as it reaches the most deep-seated germs. It is not necessary to cleanse wounds as thoroughly when iodine is used.—It is quick and sure.

A Divining Rod To Find Needles.

First the buried needle is magnetized by passing a magnet over the part of the body where it is suspected to be. Then another needle, suspended from a fine silk thread, is passed over the same locality. The poles of the buried needle will attract unlike poles of the surgeon's needle, causing the latter to swing around parallel to the axis of the buried needle, and if one pair of poles is nearer than the other, there will be a corresponding dip of the examining needle, somewhat like the way a "divining rod" behaves. By this means the buried

needle may be located with great accuracy. This provides a far simpler and readier means of locating a buried piece of steel than the use of X-Rays.

Swallowing Objects.

When pennies, buttons, etc., have been swallowed, follow them with boiled egg, cheese, potato or dry bread, which encases them and makes them harmless.

Hiccough.

Saturate sugar with vinegar and give not more than a teaspoonful at a time. Or thrust the tongue out of the mouth and hold it. Step to an open window, or better still get in the open, lock the hands high over the head and take from three to five good long breaths.

Ten drops of camphor in half cup of hot sweetened water will usually relieve. Repeat in 10 minutes if necessary. For the baby one to three drops will be enough. Even dropping some on a handkerchief and laying it near the baby's face has been effective.

Apparent Drowning.

Remove all tight clothing from the neck, chest and waist.

Sweep the forefinger, covered with a handkerchief, round the mouth to free it from froth and mucus.

Turn the body on the face, raising it a little with the hands under the hips, to allow any water to run out from the air passages. Take only a moment for this. Then lay the person flat upon the back, with a folded pad to keep the shoulders raised a little.

Remove the wet clothing as soon as possible. If in a room or sheltered place, strip the body and wrap it in blankets.

If possible, use bottles of hot water, hot irons or bags of hot salt or sand around the limbs and feet.

Wrap a towel around the tip of the tongue and keen it pulled well forward, as it generally tends to slip back and shut off the air from the glottis. Artificial respiration must be produced until the natural breathing comes. In order to do this, lay the person on the back. Let someone kneel behind the head, grasp both arms near the elbows and sweep them up and above the head until they touch.

Make a firm pull for a moment, then return the arms to the side of the body until they press hard against the ribs. Repeat this act until natural breathing comes. When the person can breathe, give a few teaspoonfuls at a time of hot black coffee or ginger tea.

Cuts and Bruises.

Immersion in extremely hot water, kept at the highest temperature endurable will allay inflammation and pain and sometimes prevent the necessity of amputation. Constantly add hot water.

For an open cut, to save stitches, after disinfecting place a strip of adhesive plaster along each side then draw them together until the lips of the cut meet and bind with another strip across.

To heal wounds wash twice a day with one drachm of carbolic acid in eight ounces of water. Wounds and bruises heal rapidly if deluged with turpentine at once. Witch Hazel and cold water mixed will take blackness out of a bruise.

For Sprains.

Mix together the white of an egg, a teaspoonful of vinegar and a teaspoonful of turpentine in a bottle and after shaking well bathe the sprain as soon as possible.

Choking.

Get down on the floor on all fours and cough.

To Sterilize Bandages.

Put them in the oven and enclosed in a covered sterilized jar after baking to be used as needed. Teach the children to suck a wound clean at once if they cannot get immediate assistance.

For Smashed Finger Nail.

This will be serious indeed unless you give it prompt attention. The finger with no nail or a defective nail can never again be beautiful. While waiting for medical attention hold the unfortunate finger in very hot water, as hot as you can endure it.

To Remove Splinters.

A splinter which has been driven into the hand can be removed by steam. Nearly fill a wide-mouthed bottle with very hot water, place the finger over the bottle and press it slightly. The suction will draw the flesh down and the steam will soon remove the splinter. Should a splinter or other foreign substance become imbedded in the flesh too deeply to be picked out with a needle, make a paste of a small part, about a teaspoonful, of the yolk of an egg and salt. Put it on a cloth and apply directly to the opening or affected part, and if left over night, it will surely draw the splinter to the surface.

Fainting.

It is caused by the heart failing to pump enough blood to the brain. Lay the patient flat on the back and loosen tight clothing. Allow free access of air. Dash cold water in the face and bathe hands and feet in cold water. Compress the abdomen and hold ammonia, smelling salts or spirits of camphor to the nostrils. When conscious give tea, coffee, or aromatic spirits of ammonia ($\frac{1}{2}$ teaspoon to $\frac{1}{2}$ glass of water).

Sunstroke.

Remove patient to shady place. Lay him down, head level with body and loosen tight clothing. Strip off clothing. Pour ice water over head and face. Rub body with pieces of ice or wrap body in sheets of cold water. Apply heat to extremities.

Heat prostration.

Cover warmly and put hot water bottle at feet. Inhale ammonia and drink strong coffee.

Fits.

Kneel by patient, put one arm under the head and with other hand remove collar. Place the handle of a penknife or any hard substance in handkerchief and put between teeth to prevent biting of tongue. Do not restrain him or give anything to drink.

Unconsciousness.

Lay patient flat, head raised a little, apply cold water to head. Keep body warm and put hot water bottle to soles of feet. Do not give stimulants.

Foreign Body In The Eye.

First try rubbing the other eye until the injured one waters freely. The weeping produced may wash the body out. Also manipulate the lid containing the object over the other lid or syringe the eye with warm water. Moisten a flax seed, put it under the eye-lid, close the eye for a moment and the substance will come out with the seed. Blowing the nose may help. If this fails, have someone remove it with antiseptic gauze.

Foreign Body In The Ear.

Put a little warm oil in it or syringe it with a little warm water with a little glycerine in it. A strong light will usually frighten an insect out of the ear. Do not probe the ear.

Bath Room Hints

Cork Bath Mats.

Standing on cold floors is harmful—for the bath room wooden and cork floors are better than metal, stone or tile. A dry cloth or towel should always be used to step on after the hot bath.

To Clean Discolored Marble.

Wash with soap and water, then wipe dry and apply a paste made of powdered Bath brick and lemon juice. Rub it well into the discolored parts and rinse it off with clean cold water.

Purifying a Sponge.

By rubbing a fresh lemon thoroughly into a soured sponge and then rinsing several times, the sponge can be made as sweet as a new one.

To Soften a Sponge.

Cover the sponge with cold water, add a tablespoonful of borax and bring slowly to the boil in a clean saucepan. Then remove the sponge rub some dry borax into it, and rinse in cold running water for several minutes.

Protecting the Bathroom Walls.

To keep the walls behind the bathtub clean, take a piece of cretonne and make a hem, as you would for curtains, run a curtain pole through and hang back of the tub. Can be laundered and always look nice.

Washrags.

Individual wash cloths should never come in contact with other wash cloths and should always be thoroughly washed in warm water and soap, and if possible hung in the sun to dry after using. Good hotels now provide sterilized cloths in sealed packets, recognizing the danger of spreading bacteria by this means.

Bathroom Walls.

There are advantages to bath tile and paint for the walls. Tile of course being more sanitary. Tile wainscoting, with upper part either painted in oil paint or papered with washable oil-cloth is good. Tile floor is not as good as some flooring in warmer material equally as sanitary.

When building a house never have the bath located on the north side as it gets little sun and subjects plumbing to exposure of cold temperatures.

Stains on Bath Tubs and Basins.

Wet a cloth with Soap suds then rub in pumice stone and scour the bath tub or basin.

Shelf for the Bathroom.

When possible have a glass bathroom shelf for bottles, tooth-powder, etc. If this is out of the question cover a pine shelf with white enameled oilcloth, tacked on smoothly, or give it three coats of white enamel paint.

Cleaning Porcelain Bowls.

Kerosene is excellent to use in cleaning porcelain bowls and tubs. Apply it with a woolen cloth to take off brown water-stains. Afterward wash with warm water.

To Clean Bathroom Closet.

Get two sheets of common rough sandpaper. Cut in three-inch squares and rub quickly inside of closet. This will remove all stain and will not injure pipes as other things do.

Soap in Pipes.

When a pipe from a lavatory basin or a bath becomes clogged with soap, mix a handful of soda and a handful of common salt together, and force it down into the pipe. Leave this for half an hour, then pour down a large kettleful of boiling water, afterwards rinsing the pipe thoroughly with warm water.

Prevent Bathroom Fixtures from Rusting.

Polish all fixtures, then saturate a cloth with olive oil or glycerin and rub fixtures with it. This prevents rusting and water will not dry on. After polishing faucets they will look bright for a week and are easier to polish.

Care of Bath Room Fixtures.

In cleaning toilet articles, the bathtub and the wash basin it should be remembered that ordinary cleaning cloths belong, like the scrubbing brush, to the early coarser process. The final cleaning must be by hot water only. Whatever comes in contact with any body aperture must be free from all possibility of bacterial contagion.

The common bathtub has doubtless frequently been a carrier of disease germs from one person to another. Before use, however clean it may look it should be scalded out and not dried with any of the cloths ordinarily given over to the purpose.

Treated as it too often is with any old scrubbing cloth or brush that may happen to be handy the bathtub in a great many homes is never really clean and its germ-laden condition makes it as serious a menace to the health of the household as the dish-wiping cloth.

Care of Children

THE KIND OF HOME EVERY BABY NEEDS.

A child's home should be sunny, well ventilated and dry and the plumbing sanitary. Flats and apartments do not afford enough freedom for growing children, although a baby may do well in such a place until it is three years old. Suburban homes give the best chance for proper growth and development. Those who live in smaller cities, and rural communities find it easier to provide their children with light, air and out-of-door space.

Keep the basement clean and dry, and wells should not be so located as to allow the water to be poisoned by the foul drainage from outhouses. Pools of stagnant water, manure heaps, or rubbish of any sort or open privies are all dangerous to health and furnish breeding places for disease-carrying insects.

The most sunny room should be chosen for the nursery, with a constant supply of fresh air. When the out-side temperature is so cold that a comfortable temperature cannot be kept with windows open, outside air should be admitted often by opening wide the windows on the opposite sides and flushing the room for a few minutes. A recent English report showed that death from pneumonia and bronchitis in children under 5 years of age was from ill-ventilated homes, and deaths from diseases caused by defective development and malnutrition were 40% higher.

Keep the room at the right temperature. Gas and oil heaters should be avoided. An open grate or stove in the room is good because it keeps the air in the room in circulation. The floor should be bare, and cleaned by wiping it with a damp cloth or dust mop. Heavy draperies gather the dust.

Moulding Baby's Body.

Don't let baby suck it's thumb or a pacifier as either may deform his mouth or thicken the lips. Constant sucking bends the teeth outward and cause them to protrude. The shape of the mouth may be improved by teaching the child to speak plainly and with distinct articulation.

Careless wiping of the nose may make it point one way or another and the little game of "knock at the door, lift up the latch" may give baby a snub nose. A tendency to over wide nostrils may be corrected by gently pressing the rostrils together with the fingers.

Be careful how baby's cap is tied on so as not to make ears stick out and do not allow the child to sleep on a bent ear. Don't pull it's ears. The hair can be taught to curl if constantly educated with a curling iron. White vaseline rubbed on baby's hair will promote it's growth.

Birthmarks are removable in childhood by cautery, electric needle or multiple scarification, as the tissues grow rapidly and soon obliterate the scars of surgical wounds. Restrain the baby from early walking to prevent bowlegs. Creeping is good to develop the chest and keeps the shoulders thrown back and develops the arms, hips and muscles of the neck and spine and produces a robust physique.

Sleeping.

Children should learn to sleep on a hard bed, with no pillow, or a very thin one. They should be fed before retiring.

Don't put baby in the center of a bed where his head may work between pillows and cause smothering.

Baby should not sleep with older persons as the sleeping movements of such may draw the covers over his face and smother him.

Crying at night means one of two things: either baby is ill or spoiled. A healthy infant properly trained should sleep every night from 7 until daylight.

Windows should be open in room where baby sleeps, but be sure that the crib is in a part of the room where no draft can possibly come. The Japanese have frames set in the windows covered with cheese cloth. These let in the air and keep out much dirt and wind. Have very little furniture in sleeping room and no lace or other curtains as they gather dust.

FEEDING.

Mother's Milk.

Mother's Milk is the best infant's food. If a mother is unable to nurse infant, the ideal artificial food is the milk of a good wet-nurse, whose baby is about the same. A healthy breast milk, being unobtainable, a food must be chosen that has all the chief constituents of mother's milk. Such food must be planned according to baby's weight. A child 11 months old usually weighs about 19, 20 or 21 pounds. If the weight is 19 pounds make a milk mixture of whole milk (certified) 34 ozs., boiled water 14 ozs. dextri-maltose 3 tablespoonfuls. If 20 pounds use 36 ozs. milk, 12 ozs. water and same amount of dextri-maltose. If 21 pounds use 38 ozs. milk 10 ozs. water and same amount dextri-maltose. Give 8 ozs. at each feeding in twenty-four hours.

MILK.

Clean milk from tuberculin tested cows need not be certified. The pasteurization of milk is recommended where origin is unknown. Milk can be pasteurized at home by raising the temperature to 145 or 150 degrees Fahrenheit and leaving it at that temperature for 30 minutes. Put the vessel of milk in water and gradually heat the water to about 10 deg. above pasteurization point. Then remove from fire, stir the milk until all parts of it are heated to 145 or 150 degrees. Leave in hot water

for half an hour. When feeding to child it should have also every day a few drops of orange juice to counteract the tendency of pasteurized milk producing scurvy. The modification of cow's milk is best corrected by your physician's formula. Evaporated milk is not quite as good for young children as fresh milk.

Baby should be fed when it awakens in the morning and at strictly regular intervals throughout the day and not between regular times. Feed every two hours during the day when very young and every three or four hours as they grow older. The last meal should be given just before tucking into crib.

The only things that should touch an infant's lips during the first year are boiled water and milk. Mush, soup, porridge, fruits, cake, vegetables, alcohol, meats, pacifiers, rubber rings, orris root, sugar, rattles and nurses fingers are abominations. Intelligent mothers are wary of soothing syrups and paregoric which contains opium.

Goat's Milk.

Goats rarely have tuberculosis and therefore, raw goat's milk is much safer for children. Goat's milk has slightly less mineral content than cow's milk and a little larger percentage of fat; otherwise they are about alike.

Colic.

Colic should be treated immediately by a competent doctor, who will probably prescribe, not drugs, but a milk that is modified to fit baby's needs.

Throwing Up Milk.

This is usually due to too frequent feedings. Up to third month child should be fed every two hours during day and every three hours during night. After this every three hours during day. Regularity is very important. Vomiting, and malnutrition may result. Persistent vomiting is due to contraction of stomach at end where its contents enter the intestine. This is most serious and requires skilful medical treatment.

Kissing the baby after feeding may cause it to vomit. The desire of relatives and neighbors to hold the baby and kiss it and to hoist it up high should be denied.

Sweets.

An important step of nutrition is taken in the liver itself, as it's function is to withdraw a large portion of the carbohydrates (Sugar) and convert them into glycogen, which becomes a reserve for the formation of other sugars. When the liver is unable to take charge of and store away the excess carbohydrate food diabetes occurs and existence of sugar in the urine is established. When feeding children the liver should not be overworked by too many sweets.

To Make Baby Strong.

Barley and lime water strengthens a baby and helps to make bone. It also renders the milk more readily digestible.

A New Use for Macaroni.

A stick of macaroni will serve in place of a glass tube for a patient who cannot sit up to drink, or will sometimes induce a child to drink its milk when otherwise it would not.

Cereals.

Cereals should be cooked two or three hours to make them quite wholesome.

Cottonseed Oil.

Cottonseed oil is quite equal to olive oil and is much cheaper. It is not superior to olive oil in any way, and is inferior to it in so far as flavor is concerned. When any one recommends it in place of butter, especially for children, he gets himself into definite trouble as butter has special flavorings and food values, particularly for the young, that neither of the oils possesses.

Diet For School Children.

Too much cannot be said regarding the malnutrition of school children. Buckwheat cakes and syrup with a cup of coffee is not fit breakfast for growing child.

Children should never drink coffee or tea, and bolting dry food and gulping ice water are pernicious practices. Milk diluted with hot water or taken cold, or cocoa prepared from the shells are excellent drinks. From a hygienic view dinner should commence with soup. Purees form an excellent lunch for children.

According to recent scientific dietaries a child from 8 to 15 years should consume daily: Proteids, 3 ozs; Fats, 2 ozs; Carbohydrates, 12 ozs; This is equivalent to: A saucer of cereal food, 1 egg, a slice of roast beef, 1 large potato, half a loaf of bread, a tablespoon of butter, a pint of milk.

Lunches For Children.

Get an attractive lunch box looking like a small suit-case with a vacuum bottle. Wrap food in parafine paper and put in a paper cup. Cheese, salmon, nuts, rasins, dates, and olives make as good sandwiches as meat. Put milk, cocoa or bouillon in vacuum bottle. Vary contents of lunch box often.

DRESSING THE BABY.

Babies should be put into short clothes at birth if born in warm weather, and at two months old if born in winter. They should be kept out doors as much as possible and not smothered with wrappings.

Babies must be kept warm but not over-dressed. The clothes must be loose to allow muscles to grow and bands must never bind or be drawn too tight as that may produce instead of prevent rupture. Babies shirts come in four weights and sizes,

all cotton, wool, cotton and wool or silk and wool mixtures being best. Shirts should be open all the way down the front. Many physicians prefer cotton or linen underwear for children as they do not over-heat nor irritate the skin and at the same time absorb moisture.

Very light weight flannel may be used. Slips should be made of soft cambric or nainsook. Extra wraps must be used when child is taken out. Night gowns and wrappers, both short and long, can be bought ready made.

Bathing Baby.

When Baby is about a week old, or as soon as the cord has come off, he has his first tub bath, which should continue daily throughout childhood.

A metal or enamel bathtub is best because they can be kept perfectly clean. The folding rubber tub is hard to keep clean.

Tub must be used for bath only and not for rinsing out soiled clothing. Many skin eruptions are the result of this practice.

Temperature of the room should be 75 degrees to 80 degrees, and no draughts. The temperature of the water for first four to six months should be 100 degrees Fahrenheit for the first eight weeks, 98 degrees Fahrenheit until six months, and after six months 95 degrees Fahrenheit, and during the second year 85 degrees Fahrenheit. The water must be tested with a bath thermometer, never with the hand.

First wash and dry baby's head and face. Soap the head and rinse off over the bathtub. Clean the eyes, ears, nose and genitals with absorbent cotton dipped into boracic acid solution, made by adding one teaspoonful of acid to a pint of water. Always use a fresh piece of cotton for cleansing each part.

Baby may now be undressed and soaped in the lap and then laid in the bathtub to rinse the soap off. Support the head with the hand. Do not use a sponge or wash cloth for young babies. A fresh piece of absorbent cotton is better.

Baby should enjoy his bath and do no crying until he is removed from the tub. Pat baby dry in the folds of a soft old linen towel which has been spread over the bath blanket in the lap. Dry carefully and lightly powder all folds and creases.

The baby under a year should have his bath in the morning just before the 9 o'clock nursing. Children with eczema should not be bathed, as the soap and water are irritating. The bath should not be omitted because of slight colds or fevers. A bath usually soothes a fretful child and induces hours of sleep.—Dr. A. C. Cotton.

Soaping Babies with the Hands.

A small baby can be soaped much better with the hands than with a wash cloth. The hands can feel into the cracks and crevices of the fat little body more effectively than a cloth, and are besides, much softer.

Doses of Medicine According to Age of Child.

- 1 to 2 months a fifteenth to a twenty-fourth of adult dose.
- 6 months, one-eighteenth of a full dose.
- 9 to 12 months, one-fifteenth.
- 2 years, one-fourteenth.
- 5 years, three-eighths.
- 8 years, one-half.
- 12 years, five-eighths.

TEETH.**When The Teeth Arrive.**

- Central Incisors—five to eight months.
- Lateral Incisors—seven to ten months.
- First Molars—twelve to sixteen months.
- Cuspids or Eye Teeth—fourteen to twenty months.
- Second Molars—from twenty to thirty months.

When the Permanent Teeth Arrive.

- First Molars—five to eight years.
- Central Incisors—six to eight years.
- Lateral Incisors—seven to nine years.
- First Bicuspid—nine to ten years.
- Second Bicuspid—ten to twelve years.
- Cuspids—eleven to thirteen years.
- Second Molars—twelve to fourteen years.
- Third Molars or Wisdom Teeth—seventeen to twenty-five years.

The temporary teeth should be well cared for. First teeth can be cleaned with a soft cloth or cotton, wiping the teeth carefully. Later a small soft tooth brush must be used. Precipitated chalk with a few drops of oil of wintergreen will answer for a tooth powder in the early years. Teeth must be brushed up and down. Introduce the child to the dentist early.

CHILDREN'S AILMENTS.**Cure For Wetting Bed.**

Worms and adenoids are often the cause for this trouble, but it is curable. Sometimes small stones in the bladder have been found to cause it. In little girls inflammation of passages adjacent to the bladder may be the cause, and should be inquired into. Sometimes separation of adhesions between certain local parts cures the trouble.

The diet should be mainly vegetarian and cereal vegetables retaining more water in the intestines. Eliminate tea and coffee. Give little fluid after 4 P.M.. Raise foot of bed slightly. Use no drugs unless by order of physician. These cases often end abruptly. The most stubborn ones usually cease at puberty.

Adenoids.

If a child breathes constantly through his mouth, has hacking cough, muffled voice or impaired hearing have him examined

for adenoids in back of nose and throat. Their removal means great improvement in health.

For a Sunburned Baby.

Bathe the inflamed skin with a solution consisting of one teaspoonful of bicarbonate of soda to a pint of water. Cold cream is also helpful in taking out the burning sensation.

Measles.

Measles is a disease fearfully underrated for child who is snuffing and sneezing may be infecting others with measles and may come out with a rash before a week has passed. The child should be sent home before it has a chance to infect others.

The mortality from measles is so great that all means should be taken to prevent its spreading. Deaths from measles are more frequent in cities. The disease should be quarantinable and rigid restrictions put upon the child attending school or any public gathering. The disease is infectious even before any eruption appears and as long as there are nasal discharges.

The only way to check measles and whooping cough is for mothers teachers and medical schools inspectors to remember how dangerous they are and to watch children carefully for signs of a cold or of any illness. It is the babies with whom measles and whooping cough go hard. Care should be taken to keep older children with colds away from younger ones.

Constipation.

Use enemas of plain water or olive oil, administered warm and slowly with an infant's rectal syringe, the hips being higher than the head during the injection. Repeat as often as necessary. If medicine must be used a few drops of the aromatic fluid extract of cascara sagrada will be found useful.

Inflamed Glands.

A lump in the neck, if it is on the same side as the enlarged tonsil, is probably adenitis (inflammation of the glands) due to absorption of the products of a diseased tonsil. If this is the case complete removal of the tonsil should be effected by operation, in a member of a family predisposed to tuberculosis, whether adenitis requires surgical treatment must be left to the judgment of the operator.

When Baby Is Feverish.

Nothing is better than a sponge bath with eight ounces of alcohol added to a quart of warm water.

When Baby Chokes.

A choking infant can be quickly relieved by pressing between its eyes with your finger.

For Whooping Cough.

The painful paroxysms which mark this disease can often be relieved by breathing the fumes of turpentine and carbolic acid.

Underweight from Malaria.

The digestive powers are lowered owing to poor vitality. nutrition must be improved while treating the malaria. You can purchase chocolate lozenges of tanate of quinine each containing one grain of the drug, and three a day of these should be given (one after each meal). Get the child to take a quarter of a pint (four ounces) of cream in a pint of milk every day (one-third of the total mixture at each meal); this will improve nutrition rapidly. To increase appetite give before meals $\frac{1}{2}$ teaspoonful of Glycerinated Elixir of Gentian (national formulary).

Convulsions.

Send at once for the doctor. Until he comes place the child in a bath very warm and to the hand, but not hot enough to burn the child's tender skin, keep the patient up to its neck in water ten minutes; meanwhile put a cold cloth about the head and wrap up warmly in blankets. Give now an injection of hot soap suds plus a tablespoonful of olive oil to empty the bowels. Then, as soon as it can swallow, a teaspoonful of syrup of ipecac to empty the stomach. After the bowel movement inject into the rectum a tablespoonful of thin boiled starch and water plus from two to five grains of chloral for child under two years of age, and retain it by means of a towel.

Night Sweats In Children.

Tuberculosis or nervous debility may cause the night sweats. Give fresh air day and night, sleep on hair mattress with light bed clothing. Avoid woolen clothing next to skin. Bathing with vinegar, light diet especially evening meal watch condition of bowels, remove adenoids, or dental defects or diseased tonsils and play outdoors.

Give following:—Elixir of Hypophosphites with Iron (National Formulary)—4 ozs. One teaspoon after meals, in water.

RICKETS.

Marked perspiration about the head is sometimes a sign. Fresh air, sunlight and generous diet are essential. Fresh milk, eggs and fresh meat juice are important. Give 5 drops syrup of the iodide of iron in water after meals.

Signs Of Sickness In Children.

Sudden cold in nose or throat, hot flushed face, very bright eyes, rash of any kind, cough of any kind, (especially whooping) shivering, and irritability in well behaved child indicates illness.

Book on Childs Health.

Write for good one to "Child Health Editor, United States Public Health Service Washington D. C. ". It is free.

Skin Diseases.

Itch, ringworm, lice and exema. These are serious and contagious—see a Doctor who specializes on skin diseases. They may contaminate the whole family.

Biting the Finger Nails.

A careful examination of the child should be made to discover remediable defects that may be causing nervous irritation. Harsh treatment and punishment aggravate the trouble. The daily bath is important. If the child is anemic she should be given ten drops of the syrup of the iodide of iron three times daily, after meals, in water. Constipation should be corrected if it exists. Certain local catarrhs in little girls often require special attention in these cases. The nail-biting should be regarded as an expression of nervous irritation or of nervous energy denied proper outlet, as, for example in active play.

To Prevent Thumb Sucking.

A cardboard cuff around the upper arm will often prevent a child from sucking its thumb, a habit that is liable to cause serious deformity of the mouth, nose and teeth.

“Do” Instead of “Don’t”.

Try the effect of saying “Do” to child when you are tempted to say “Don’t”. It is a shorter word and not so irritating. It gives a positive and suggestive effect to the child, while “Don’t” gives a negative and depressing effect. In a world teeming with interest and excitement stimulate the young mind. You, as the wiser, should be able to tell the child something good to do instead of showing your limitations by prohibiting something he may have thought of himself.

MISCELLANEOUS.

Pearl Barley.

Put 2 good-sized teaspoonfuls of washed pearl barley into one pint of cold water in a saucepan, and then boil slowly down to two-thirds and strain.

Giving Castor Oil.

Give in hot milk flavored with salt and a sprinkle of black pepper being sure milk is warm enough to mix with the oil. Or mix castor oil with lemon juice, orange juice or milk. It is prepared in capsules, also.

When glass is broken, put a damp cloth on the floor wherever the pieces are and pat the damp cloth. This will pick up the broken bits and cloth can be burned afterwards. Or use wet old absorbent cotton instead of cloth.

Floors Made Safe For Baby.

Tie a magnet to a string and run it over the floor. No pins or needles escape it.

Glue For Children.

Tapioca, soaked in water, makes a harmless, stainless and odorless glue.

New Kind Of Easter Eggs.

When boiled hard and cooled, write names or draw flowers, rabbits, etc., on them with a stub pen dipped in melted wax. Drop the eggs carefully into any dye that can be boiled and boil two minutes. Wipe each egg with an oiled rag, and designs or names will appear in white on colored backgrounds.

Toys For Visitors.

Toys for little visitors should be kept in households where there are no children, yet where children are likely to be taken by their mothers. A doll or horse will amuse a child for a long time and allow the older people to enjoy themselves.

Use Of Knife And Fork.

Children should be taught early to use knife and fork correctly. It is easy to teach proper table manners if the child is made to understand he must eat neatly. It is a good plan to have a small table where the child can have his own dishes and be served separately from the family meal until he is older.

Dishes For Children.

To prevent the small child from upsetting his dishes while eating, procure a large porcelain dish with a clamp which fastens to the under side of the table or high-chair. It comes in only the large size and is attractively decorated with pictures.

Napkin Under Baby's Chin.

Make a simple knot in one corner of napkin, slip this knot underneath the neckband of baby's dress and napkin will remain spread out and will not fall off. Patent bib-fasteners are better still.

Use of High Chairs.

Never put a young baby in a high chair until it is able to hold the spine and head erect, and then not for any length of time, as the spine may be deformed. Mothers should not leave the baby fastened in a high chair to take care of itself during her absence.

How To Lift Baby.

Persons not careful when lifting a baby may dislocate the child's shoulder joint or do it other harm. To lift a baby slip the left hand under the back beneath the shoulders, spreading the fingers out so as to support the neck and head, lifting the feet and legs with the right hand, giving the spine proper support.

Walking.

A child 2 years of age should be walking. If this is not the case, have it carefully examined. Hip joints in particular should be investigated. Children are sometimes born with

upper ends of thigh bones out of joint. If walking has simply been delayed, resort to massage or try one of the mechanical devices employed to help children begin to walk.

Careless Nursemaids.

Do not leave your child in care of incompetent nursemaids or careless friends. You may regret it if you do. A too rigid obedience of child to nursemaid should be viewed with suspicion. Keep your eye on the nursemaid.

Bloomers For Children.

Bloomers can be made from stocking legs. Cut long enough to allow for hem at top and bottom. Sew a piece from another stocking eight inches in the center, finish another bloomer, hem top and bottom and put in elastic.

“Dont’s” For Mothers.

Don’t allow a child to play within reach of boiling liquids. Scalding is the chief cause of infants deaths.

Don’t leave a child alone in the presence of open fires, or where matches can be reached. Fire has a fascination for children.

Don’t keep bottles of poisonous liquid or pills about the house where they can be reached by child. Keep medicine closet locked and key out of reach.

Don’t let a child play with sharp articles. Injuries to eyes and mouth are due to falls.

Don’t permit a child to play with a talcum powder box. The paint comes off and the powder has proven deadly poisonous.

Baby Fence.

The very best thing a father can get for his baby is a white painted collapsible fence, 18 inches or more high and about 4 feet square that has a folding floor and will itself fold up. They can be bought at a large furniture store. The fence can be used in the house or out of doors. A washable cotton rug can be put on the flooring if desired. This makes a safe place to put an infant where no harm can come to it by its own actions. The cost, \$10.00, is well invested.

Popcorn In The Home.

Popping corn is a delightful past-time. A sugar syrup boiled until it will crackle in cold water will give the corn a firm coating of crystal that will add to its keeping qualities. It can be moulded into balls while the syrup is plastic. By running the popped corn through the meat chopper it can be cut up fine for candy making. The hard grains that are left will make a delightful cereal for serving with cream and sugar, if they are ground through the coffee mill.

Enliven a children’s party by using old-fashioned Dutch oven or skillet for popper. When corn is popping, set the vessel

upon the floor and remove lid The popping grains will leap in all directions and cause a scramble among the children.

The cost of pop-corn varies from two to seven cents per pound for shelled corn. There are few things containing the same food value and as wholesome as pop-corn, and it is always popular.

Popping corn is a happy way to entertain young folks and to busy the older one. Its equal for enlivening rainy days has never been found.

Care of Clothes

The House Dress.

Do not wear a street dress when doing house work. Wear a house dress of chambray, gingham, seersucker or material that washes easily. To be ready for the street or visitors, wear a house apron over street dress.

Good Clothes Need The Most Care.

Good materials, cotton, silk or wool need more care than cheaper ones. However careful clothes get grease from the perspiration of the body and in spite of washing will become dusty and form breeding ground for tiny vegetable growths or Bacteria, which set free an acid that eats up the cloth. Good clothes, instead of being put away in boxes and drawers, should be constantly aired and shaken. A coarse piece of goods will wear out by use, a fine piece by being put away.

Cleaning fluid.

One pint Deodorized Benzine.

One ounce Alcohol.

One ounce Spirits of Ammonia.

Shake well and apply with sponge and rub well. When dry rub over with slightly warm iron. Takes grease from all fabrics and renews black goods.

Dry Cleaning.

When sending garments to the dry cleaner, examine them so as to remove all pins or jewelry, then mend the hips. If there are grease or other stains on dark suits that might escape the cleaner's notice, take a needle and white thread and outline the spots.

To remove rings after cleaning, hold the material in the steam from a kettle for a few moments. The material should be thoroughly dry before it is held in the steam. Gasoline is the best and most harmless thing to use in cleaning woolens, velvets, etc. etc.

The Hose For Woolen Skirts.

Woolen skirts can be cleaned successfully by hanging them on the clothesline and turning the hose on them. First the right side, then the wrong side is given a thorough soaking, and left on the line until dry. After this treatment the skirt will be soft and clean, and will need little or no pressing.

Alcohol for Black Clothes.

For freshening up black clothes—woolen goods and crepe de chine especially—there is nothing better than alcohol. Naphtha or gasoline often leaves rings around the parts cleaned, but alcohol does not. A good rubbing over with a cloth wet with alcohol, and a pressing after it is dry, will make a black crepe de chine waist look like new.

To Take Out Rain Marks.

Iron the cloth on the right side with a moderately hot iron, placing a clean damp cloth between the material and the iron. Keep cloth damp in order to make this a success. The rain marks will disappear, and the cloth will not spot again.

Flour Baths for Delicate Woolens.

Delicate white woolen things can be easily and quickly cleaned by giving them a bath in a basin containing only a few handfuls of ordinary wheat flour.

Restore Black Goods and Hats to Natural Color.

Sponge the article or garment thoroughly with alcohol. This will not injure the most delicate fabric and it will look like new.

Home Dry Cleaning.

Make a mixture of cornmeal, a handful of borax and a half cake of magnesia. Mix these dry, and scrub the things to be cleaned with it. A small soft brush is best to use for scrubbing flat, firm garments. To clean wool shawls, sweater, etc., sprinkle the mixture over the garment, place inside a sheet, fold several times and beat lightly.

To Clean Soiled Coat Collars.

Clean by dipping an old toothbrush into naphtha, or any cleaning fluid and rubbing briskly, or wet it in turpentine, let stand a little bit then scrape off dirt being careful not to injure the cloth. Repeat as often as necessary, then sponge with clean water and turpentine, and wipe dry. A little chlorform or alcohol at the last will improve it.

To Press Sleeves.

Use a wooden rolling pin covered with flannel. Insert the pin in the sleeve when pressing. Press seams and wrists in the same manner.

To take Creases Out of Clothes.

Hang the clothes in the bathroom while the hot water faucet is turned on.

Good Cleansing Formulas.

Equal parts of ether, ammonia and alcohol will make a solution that removes grease from clothing. Keep the solution in corked bottles and away from fire. It is harmless to the texture.

Grate raw potatoes to a fine pulp and add 1 pint of water to 1 pound of potatoes. Pass this liquid through a fine sieve or cloth and let it stand until the white starch settles to the bottom, then pour off the clear liquor. Dip a sponge in the liquor and apply to dresses until dirt is removed. Rinse in tepid water. For white silks add a little borax.

Use For Absorbent Cotton.

When milk is spilled on a woolen dress or coat, at once apply absorbent cotton. All traces of the stain will be removed.

To Clean White Sweaters.

White sweaters or chinchilla coats may be cleaned by placing them in a pillow slip and sprinkling them with ten cents' worth of plaster of paris. Shake well until the garments look white, then remove, hang out of doors and beat the remainder of the powder out.

Make a paste of a white soap and water by boiling the shaved soap until dissolved. Cool and add one tablespoonful borax and one-half cup wood alcohol. Have warm water in plenty ready (in bathtub); add soap solution to water and put in sweater. Swish up and down without pulling or rubbing; repeat in more sudsy water. Then rinse in water equally warm and squeeze without twisting. Lay in a pillow case and hang in open air; turning once or twice. When almost dry, lay on a table or ironing board and pin into shape, flat, with arms and fronts even and in place and allow to dry, in a warm temperature. Lay in suitcase or on covered coat hanger. Never hang up articles when wet.

A Hammock for Your Sweater.

Make a hammock out of mosquito netting and stretch it between two poles as flat and straight as possible. Then dry it in this swing. It will keep its shape much better. Do not allow the sweater to double over, or lie in folds.

To Clean Silk.

Cleaning with gasoline is the best. Do it out of doors. Or leave article over night in powdered magnesium and shake and brush in the morning.

To clean black silk boil 3 pounds of potatoes to a pulp in a quart of water and strain thru a seive, then brush the silk or satin with it on a board or table. Do not wring. Fold in cloths for 3 hours and iron on wrong side. Black tea cold and strong is excellent for black silk.

Pressing Silk.

To prevent silk from becoming hard and crackly, press it under a piece of muslin dampened, using a hot iron.

To Renew Black Silk.

Add about one teaspoonful of turpentine to a pint of luke warm water and sponge silk with a piece of old velvet. Press with medium hot iron.

To Wash Ribbons.

Make a clear lather of clean white soap in very hot water. Rub ribbon through this; Apply soap where there are grease spots on the wrong side. Rinse in cold water. As soon as washed press them out while wet on wrong side; they will wrinkle if not pressed while wet. Dip in a solution of gum arabic to stiffen before ironing.

To Preserve Ribbon.

Ribbons, and other silks, should be put away in brown paper.

White silks or satins should be pinned in blue paper, with brown paper on the outside, sewn together at the edges.

To Renew Soiled Ribbons.

Wash in water (one gallon) into which 8 pared potatoes have been grated.

Put a tablespoonful of ammonia in a pint of warm water. Lay the ribbon on a flat soft surface and sponge on both side with a cloth, keeping the ribbon free from wrinkles. Rinse in clear water when clean and at once iron smoothly. To stiffen before ironing dip in slightly sweet water.

To Clean Velvet.

When velvet is spotted or stained dip a spare piece in spirits of turpentine and rub it over the surface, using a fresh piece frequently.

To Take Grease from Velvet.

Rub the spots on the silk lightly and rapidly with a clean, soft cotton rag dipped in chloroform. Repeat until all trace has disappeared, being sure to rub rapidly and lightly. Rectified benzine is also good used in the same manner.

To Restore Pile on Velvet.

Hold the wrong side of the velvet over boiling water.

To Renovate.

Put some soap bark in bag and boil it. When suds is luke warm, wash the velvet and rinse in clear, tepid water. Blot it between two clean cloths. Do not wring. Pass it over a warm upturned iron, back of velvet to iron, until dry.

To Wash White Laces At Home.

Cover a bottle smoothly with linen, sewing it on. Wrap the lace around the bottle, basting it to the linen. Soap it well with Ivory soap, or some similar soap. Rinse by plunging it up and down in cold water. Then boil in water till it is white, and set it in the sun to dry.

For lace slightly soiled, equal amounts of magnesia, french chalk (powdered) and cream of tartar. Leave it for a week or cloth and sprinkle with the mixture. Leave it for a week or more. Wipe with a soft cloth, or wash fine laces carefully on flannel with strong suds of white soap and water, add borax (2 teaspoons to pint boiling water). When it is luke warm, put lace in and leave all day. Wash carefully and gently rinse. Tack the flannel on a board and let dry. Keep fine laces in powdered magnesia and wrapped in blue tissue paper.

Black lace can be washed in milk, then cover with a cloth and ironed on the wrong side, or soak in two tablespoonful of vinegar to one pint of water. Rinse and iron as above.

Spread delicate laces out on paper, cover with calcined magnesia, place another paper over them and put away between the leaves of a book for three days. Shake to scatter powder.

If a little body is desired without starching, rinse in milk and iron. Or squeeze them through skim milk, to which a little bluing has been added. Stretch and dry them or dry and iron between cloths over a Turkish towel pad.

To clean lace collars or yokes that are sewed to a dress, without removing, wet cornmeal with gasoline and rub into lace; as the gasoline evaporates cornmeal will drop off taking dirt with it.

Apply a white paste such as is used for cleaning white shoes to fine lace yokes. Rub paste on smoothly, let dry, then brush off.

To Starch Old Lace and Handkerchiefs.

Use the water in which rice has been boiled. It gives a peculiar, soft stiffness, adding greatly to their appearance.

Use a bag to put fine laces and dainty handkerchiefs in to wash.

Darning.

To darn a large hole in stockings, take a common mosquito netting and sew on hole. Draw the yarn in the ordinary way through the meshes, skipping every other mesh, so when you darn crosswise you will have the meshes to darn through. Old pieces of lace or veils will do as well as net.

To Darn A Stocking Quickly.

When the boy comes in with his "knee out" don't darn the hole in the stocking, but baste a piece of black crinoline a little larger than the hole on the wrong side and with black darning cotton weave back and forth through the crinoline a few times each way and the hole is mended.

To Darn Old Linen.

The ravelled threads from old linen will be found best for darning table-cloths or napkins.

To Clean Tan Shoes.

Plain soap and water applied with a stiff brush (after putting the shoe on a shoe-tree to prevent shrinking) will remove all spots of dirt and grime. Give a good polish afterwards, or rub shoe with powdered pumice stone before shinning. It will remove almost every mark or stain, or rub with banana peel.

To Remove Grease Spots from Tan Shoes.

Dab the soiled places several times with spirits of sal ammoniac, and after allowing it to act for a while, wash with clear water. The process may be repeated a few times, being careful not to injure the color of the leather.

To Clean White Kid Shoes.

Make a smooth, thin paste of flour and benzine and apply with a brush. When done place outside to air and when dry brush with a cloth and your shoes will be like new, or a lather made of pure white soap and milk is excellent for cleaning white kid shoes. Brush off as much dirt as possible before

scrubbing with the lather, or brush them thoroughly first; then clean with scouring powder by dampening a cloth or sponge and rubbing briskly. This will remove the dirt instead of covering it over, and leave the shoes as white as when new. A solution of oranges shellac and alcohol should be applied to white shoes when cleaned a ten cent bottle will last a long time.

For Patent Leather Shoes.

Rub all over with a little vaseline put on with a piece of soft flannel, and polish. Patent leather should be kept in a warm, dry place, and not worn on wet days.

Clean with sponge and warm water. Warm the leather with gentle heat but take care not to get it too hot, and apply sweet oil or olive oil with or without an equal quantity of turpentine. Apply the oil with a sponge or cloth and rub with the palms of the hands while the leather is warm. Apply ordinary blacking to the edges of the soles, or liquid varnish blacking with a sponge or brush. Do not apply paste or liquid blacking to patent leather.

When Breaking in New Shoes.

Sprinkle your shoes inside with a generous quantity of talcum powder. You will find this the greatest relief to the burning and smarting caused by the drawing of new leather.

To Preserve Shoe Leather.

Apply vaseline with a clean cloth, spreading it thinly over the leather. If used on new shoes the leather, especially enameled leather, will remain soft and be far less liable to crack.

Polishing New Shoes.

Rub new shoes over with a slice of raw potato, and they will polish as easily as old ones.

Orange and Lemon Juice for Shoes.

Lemon juice makes a good substitute for shoe polish if a few drops are well rubbed into the leather. Orange juice is remarkably efficacious in freshening shoes and especially for the delicate texture of baby's shoes.

To Clean Rubber Shoes.

Wipe clean, wash off with a little milk on a rag, wash off with clear water.

When Shoes Creak.

Apply a little olive oil or melted vaseline to the soles rubbing in well, especially about the waist and ball.

Emery on Suede Shoes.

Spots on suede shoes can be removed by rubbing lightly with an emery board and then brushing.

For Wet Boots.

Boots and shoes, however damp, will polish in a few minutes if a drop or two of paraffin oil be added to the blacking. It also prevents the leather from cracking.

Shock-Proof Shoes.

A manufacturer has recently placed on the market a line of shoes for electrical workers which are made to withstand potentials up to 20,000 volts without harm to the wearer. The shoes contain no cement, and have no seams, but are vulcanized into a solid piece under high pressure in aluminium moulds. A feature of the shoe is that the soles are white, and under the white surface is a layer of red rubber. When the sole has worn down to the point where the red is exposed, it is a sign that a new half-sole should be secured in place. Rubber soles are invaluable to most people who use them; saving the feet and the nervous system. Rubber heels absorb nervous shock.

To Soften Boot Polish.

Boot polish which has become dry can be softened by addition of a few drops of turpentine.

To Clean White Straw Hats.

Get five cents worth of salts of lemon in drug store, put one teaspoon in half cup boiling water. Wash hat well with small brush; repeat, then wipe well with clean cloth and put in sun to dry.

To Clean Soiled Hat.

Take good white soap and cold water. Scrub hat and rub dry. Cold water does not take the glue from the hat, but leaves it glossy, the same as when new. Then take lemon juice and scrub well, wipe dry and you have a new hat.

Renovating a Felt Hat.

Use a fine grade of emery paper and you will obtain beautiful results.

To Bleach Straw Hats.

Wash in pure water, scrubbing with a brush. Put the hats into a box in which is a saucer of burning sulphur. Cover them up so that the fumes may bleach them.

For a Cracked Derby.

Hold a lighted match inside the hat as close to the broken spot as possible. The heat softens the texture of the hat, which can now be brushed with a stiff brush until its former smoothness is entirely regained.

Sandpapering Your Hat.

A white felt hat can be readily cleaned with a piece of fine sandpaper. If this is not available, mix cornmeal and salt together, using two-thirds of meal. Rub in thoroughly and allow to stand over night before brushing out.

STAINS.**To Remove in Black Goods.**

Water stains in black goods can be removed with strong ammonia water.

To Remove Grease from Silk.

Rub magnesia or some French chalk in well on wrong side and let stand awhile. Then apply a piece of soft brown paper to wrong side and press gently with a warm iron. Then wash with warm water if spots still remain.

For Grease Spots on Taffeta.

Rub the spots thoroughly with talcum powder, and then hang the garment away for a day. Brush off the talcum powder and rub the stained places with a flannel cloth.

To Remove Grass Stains.

To remove grass stains from white woollens apply cream of tartar mixed with water or alcohol.

To Remove Perspiration Stains.

A strong solution of soda is first applied followed by a thorough rinsing with water or try alcohol under the arms. Brush with a stiff whisk broom to remove the powder. If the dress will stand water use a paste of ivory soap on a damp rag.

To Remove Chewing Gum.

To remove chewing gum from clothing, hold a piece of ice tightly over the gum for a few minutes. This will harden the gum and cause it to crumble so that it can be brushed off with no injury to the cloth.

To Remove Tar from Clothes.

To remove tar from clothes rub butter or lard over the tar spots, then wash with soap and water. Apply oil of turpentine and let remain for one hour, then wash again and the tar will be removed. Kerosene removes tar, then wash.

To Remove Tobacco Stains.

Hold the fabric over a basin and pour hot water through it. This drives stains out of the goods and prevents it from spreading.

Washing the solid article in gasoline will usually remove grease spots from any woolen fabric. Alcohol and salt rubbed into the spot will serve the same purpose.

To Remove Fruit Stains.

If the color of silk goods has been taken out by fruit stains the use of a little ammonia in water may restore it.

To Remove Ink Stains.

An ink eradicator bought at drug store is better than an acid which may eat the fabric. If oxalic acid is used place immediately on spot some javelle water and remove both with boiling water.

It is difficult to get stains out of goods not fast colored without running. Dip the goods in milk, if goods are colored and ink fresh and leave them in milk until it sours and rinse in clear water.

Soaking in coal oil for several hours and then washing in

strong soap suds is good. To remove from white goods soak in vinegar one half hour and wash with weak solution of chloride of lime. Sometimes salt and lemon juice will be good on white goods.

Dry ink stains may be removed by dipping in hot milk and gently rubbing and repeat if needed. Other ink removers are; one grain of permanganate crystals to a quart of water to remove indelible ink; a thick mustard paste allowed to remain 24 hours and removed with water; for linen use melted tallow then wash. All acids should be applied with medicine dropper to avoid spreading.

To Remove Mildew.

Use lemon and salt; or take soft soap and rub on spots, sprinkle thickly with salt and lay on grass to bleach; rub spots with ripe tomato until wet then sprinkle with salt and lay in sun; mix soft soap and powdered starch and add half as much salt and juice of lemon and rub well and lay on grass for a day and night.

To Clean Silver Purse.

Scrub with a little baking soda and warm water with a soft toothbrush. Rinse with clear water and dry.

To Clean White Leather.

Wash with Ivory soap and milk and use a flannel cloth for rubbing.

To Clean White Belts.

Make a thick paste of cream of tartar and cold water. Rub belt well with it. Leave for an hour, and then rub with a mixture of alum and fuller's earth in equal parts. Next day brush the belt with a clean soft brush till powder is removed. Rub again with some coarse oatmeal to which a little powdered whitening has been added.

To Clean Feathers.

Take an old-fashioned curling stick or round ruler and hold the feathers close to it lengthwise. Fold the down softly and carefully around the wood. Slip over it a closely fitting bag made of clean scrap of silk and a trifle larger than the curling stick. Hold the bag in steam of kettle until thoroughly dampened. Place in a warm spot to dry. When bag is removed feather will be found nicely curled.

To Make Stockings Wear Longer.

Darn heels and toes when new, before wearing. To prevent their wearing at the heels line the back of shoe with a piece of black velvet. Silk stockings will not show holes nearly so quickly if before wearing you rinse them in soap and water. Be sure that no soap is left in the silk at any washing.

To Clean Gloves.

Clean gloves in naphtha. Coat white gloves with flour while they are wet. Hang in sun and they will come out like new.

To Clean Jewelry.

Jewelry should be cleaned with a brush dipped in water in which you have dissolved soap and ammonia. Lay in sawdust to dry.

To Clean Furs.

Clean white fur by rubbing warm bran into it with a clean piece of flannel. Furs can be cleaned quickly by laying them flat on the table and rubbing bran moistened with warm water into them, using a little at a time. Shake out the bran and brush with soft brush on which a few drops of sweet oil have been sprinkled.

To Clean Pearl Buttons.

Rub with a little olive oil; then take some nail powder and apply as for finger nails, letting it dry on for a moment. Polish with a buffer or piece of chamois skin.

To Clean Light Parasol.

Open parasol, take a soft brush, water and good white soap, scrub till all dirt disappears then rinse with clean water and hang open in hot sun to dry.

Superiorty Of Vegetable Dyes.

Aniline colors often fade to entirely different colors, while vegetable dyes usually fade to tones of their own colors. The finest Oriental rugs owe their soft, wonderful colors entirely to vegetable dyes. The Persian Government prohibits the importation of aniline dyes.

For A Loose Ring.

Stick a narrow strip of adhesive tape around inside the ring, sticky side to ring.

Setting Lace Insertion.

When setting lace ininsertion into lawn dresses, stitch the insertion on the goods then cut material away, about one-fourth inch from stitching, put it flat into the foot hemmer of the machine and hem. This insures neat, firm work, which will stand many washings. The insertion can be put on in all sorts of fancy patterns without danger of its pulling out.

Sewing With Two Needles at Once.

It will often facilitate sewing to use two needles at the same time. In shirring two rows can be run in almost the same time as one, and in sewing a braid flat on the bottom of a skirt a saving both of the skirt and of time will be accomplished by the use of two needles.

A Good Material for Kimonos.

India print is a very durable material for kimonos and dressing sacques. It is like an excellent quality of percale without dressing. The figures are stamped, not woven, but they will not wash off. The indigo blue and white is effective.

Mend Your Clothes.

Mend your clothes; never put away a garment that needs a stitch taken in it; that is one economy which counts.

Something Worth Knowing.

Before wearing knit underwear take the garment on the sewing machine and stitch twice around each buttonhole close to the edge and it will always stay buttoned.

A Handkerchief Hint.

Embroideries and handkerchiefs that have scalloped edges will not pull out if crocheted, using fine thread and hook.

A Quick Way to Thread a Needle.

To thread a needle when the light is bad and it is hard to find the eye, put a piece of white cloth or paper back of the needle. You will be surprised to see how quickly the thread will go through.

Basting.

Time is saved and work lightened when basting if several needles, five or six, are threaded in succession. Then break the thread the desired length and knot, beginning with the last needle threaded, until all are ready to use.

When Making Buttonholes.

To make buttonholes on thin material, before cutting the buttonholes baste a piece of India linen or muslin underneath where the buttonholes are to be. Cut the buttonholes through both and work. When finished, cut away the piece of goods underneath close to the work, and the result is a good, firm buttonhole.

Instead of Buttonholes.

Children's clothes, especially rompers, require a great many button holes. Make loops of soutache braid. Cut the loops a little long, so that they will not pull out, stitching them in place.

A Clever Sewing Hint.

Take an old pillow-case and some strong wire. Run the wire through the hem of the pillow-case, twist the ends of the wire together and shape the opening into an oval. The wire holds the case open. This makes a fine bag for sewing, laundry, or what you will.

Good Use for Old Shirts.

Make your little boy's rompers out of your husband's old shirts, using the front for the back and the back for the front and sleeves and collar out of the sleeves.

Two Sewing Hints.

With your sewing keep a horse shoe magnet (a 5-cent one will answer) tied on a ribbon to find and pick up your needles and pins for you.

To prevent draw strings pulling out catch with a few stitches in center or at seam.

To Get Rid of Moths.

Moths cannot bear the light and are sensitive to strong odors. Tobacco, camphor, naphthaline cones or balls and cedar chips or sprigs, have value but as odor weakens the protection decreases. Blotting paper saturated with turpentine and placed in drawers when clothing is stored is of great service in keeping moths away. Moths hate newspapers; and will rarely touch anything wrapped in them. Wrap Winter clothes entirely in newspapers before putting them away for the summer and you may feel reasonably certain that moths will not harm them.

For storing furs and woolen clothes, make large bags of unbleached muslin, with draw strings at top and bottom. Soak the bags in turpentine and hang in the air until the odor is destroyed. Place the clothes on hangers, adjust the covers over them and draw the strings tight.

For the home keeping of woollens and furs the work must be started in warm days; careful beating, airing and brushing are of first importance.

When clean, the garments should be sealed in well made bags of linen or paper or in pasteboard boxes whose openings are pasted over with strips of paper.

Pepper Your Furs.

If fur garments are plentifully sprinkled with pepper, moths will not attack them. The pepper leaves no unpleasant odor and can easily be shaken out when the clothes are to be worn.

To Remove A Tight Ring.

Take about a yard of cotton cord, soak in soapsuds, glycerine or oil. Wind it snugly around the finger from near the end to the knuckle joint, pass the end of the string under the ring and pulling the string tight, unwind it. The tightly wound string lessens the blood pressure near the ring and little by little the string presses the flesh and pulls the ring, easily removing it.

To Safeguard Your Trunk.

Thieves can be thwarted by cutting a hole in the trunk strap where it goes between the upper and lower parts of the buckle, and through this hole snapping a padlock.

Little Mendings Save Pennies.

A buttonhook or nail file is often discarded because of a loose handle. Pull off the handle and scrape off all the filling on the handle. Mix a small amount of cement (the liquid kind that comes for mending china and glassware) with an equal amount of fine beach sand and pour the mixture into the hollow handle and immediately press the spike into the cement as far as it will go. When dry the handle will be firm.

To Make Your Petticoat Wear Longer.

A black china dust ruffle, in place of the cotton one usually found on a silk petticoat, reduces friction and makes the skirt wear longer, as it sheds dust and washes nicely, and if of good quality it will outwear two petticoats.

Button Holes.

When sewing on buttons and making buttonholes, always make the buttonholes first, marking the places first with bast-ing cotton.

Numbering Dress Patterns.

In opening a dress pattern write the number of the pattern on each separate piece of pattern paper. This saves time when replacing them in their envelopes.

Aprons Made of Shirts.

A neat kitchen apron can be made by using a man's discarded shirt. Turn it so that the opening will be in the back; cut off the cuffs, making the sleeves as short as you wish and trim out the neck in a round or square yoke effect. The shirt is already hemmed, and the side openings can be left as they are.

A Seamstress Valuable To Household.

The busy woman should employ a seamstress one day a week to go over the household linens, personal clothing and other items that need attention. An intelligent seamstress is able to do the shopping incidental to the renovating. Frequently she has a better notion of what should be purchased than you and better informed on bargain prices.

The family mending is in itself a burden to the housekeeper who tries to include outside activities. The weekly visit of the seamstress will relieve her of anxieties connected with the sewing and laundry. Garments will last longer if attention is given them at once.

To Make Edgings Last Longer.

Life may be given to all embroidered edgings by running a straight row of close machine stitching just at the head of the scallops or points. This is easily done in the flat, but can be done on garment already made up. Judgment has to be used as to size of thread used. No. 50 is coarse enough for heavy embroideries, higher numbers for finer grades.

Faster Bead Work.

Keep the needle dipped in water constantly. A dry needle allows the beads to slip off.

Soap For Hemstitching.

When preparing to draw the threads for hemstitching or drawn work, dip a small brush in water, rub lightly on a cake of soap and draw evenly over the threads you wish pulled. They will come easily and will seldom break.

When Machine Sews Poorly.

When your machine will not sew a certain goods, or only puckers it, lay a piece of paper on each side of the goods, and sew through it all. The paper can be torn off afterwards.

Whalebone.

To straighten and renew whalebone soak till it bends easily and press with warm iron.

Dining Room Hints

The Breakfast Table.

Arrange cups and saucers, creamer and sugar bowl in front of hostess. A coffee stand should be placed at the right of the hostess for the coffee pot.

The heavy dishes are placed in front of the host, so that he may serve.

For fruit, finger bowls should be used.

The Dinner Table.

The carving set and knife and fork rests should be laid in front of the host. The host serves the fish and meat.

The soup ladle should be placed in front of the hostess, handle to the right. The hostess should serve the soup, salad, dessert and coffee and usually the vegetables.

The soup spoons should be placed at the right of the knives at each place, bowls up.

Rules For Serving.

Cold food should be served on cold dishes, hot food on hot dishes.

Never fill glasses or cups more than three-fourths full. Fill before each course.

Do not let the table become disorderly during the meal.

When passing a dish, hold it so that the thumb will not rest upon the upper surface.

The waitress should stand at the back of the hostess, or while the meat is being carved, at the back of the host. She should take each plate from the left as it is ready to serve, in her right hand, and place it before the person for whom it is intended. Everything is served at the left, except liquids in glasses or cups and saucers.

In passing dishes from which a person is to help himself, pass always to the left side, so that the food may be taken with the right hand.

All soiled dishes should be removed from the left. The waitress should never pile one dish upon another.

When one course is finished, soiled dishes should be removed first, then food, then clean dishes then crumbs.

When folding the table cloth or napkins always fold very carefully in the same creases.

Serving Meals.

In the simplest form of serving, meats are carved on the table, vegetables passed. Maid places roast on table, and returns to left of server, setting one plate before him. When filled, she removes it with the right hand while substituting with the left hand another empty plate she has been holding. In placing the filled dinner plate before guest with her right hand, she removes service plate with the left, placing same on

serving table and returning to her place beside server holding another warmed plate, which she substitutes for a filled one. The first guest served should be the one at the left or right of hostess, who was first served to soup. Serve all upon one side of the table, then those upon other side. If there is no maid, the plates are placed right side up at each place.

The place laid for each person is called "the cover." The space allowed for each "cover" should be 25 to 30 inches in length, 15 to 16 inches in depth! that is, each individual service of napkin, plate, silver, glasses, should be laid inside such a space. Place knives at right, half an inch from edge of table, with blades turned toward the plate, the first to be used farthest from the plate; then spoons with bowls up; forks at left, with tines up—same rule as to order of use; of napkin at left of forks; glass of water near point of knife; individual salt and pepper dishes with salt spoon, opposite center of plate, or one set for each two people, between the two covers. For a formal dinner butter is not used; for a home dinner the proper place for individual butter plates is at point of dinner fork.

Correct Costume for Maid.

A light wash dress, white color and cuffs, and plain, full-skirted, shoulder-strap apron is the correct morning costume for a maid, to be worn until just before luncheon. For dinner, a light weight black dress with dressy white apron is correct.

Electric Devices.

Have a switch underneath the dinning room table. Three or four cooking devices can be connected with this plug and no wires overhead used at all. This is much more convenient and any electrician will put it in for you at small expense.

For Floral Center Piece.

Too many colors must not be mixed in floral centerpiece for your tables.

Care Of Silver.

Washing soda with a small disk of aluminum in boiling water cleans silver instantly. The silver must be in contact with the aluminum. Clean large silver vessels by putting them in the wash boiler. An aluminum pan (not a new one, for it will be corroded and spoiled) can be used instead of the disk.

To keep silver bright and save much cleaning and polishing, immerse once a week in sour milk and leave for 20 minutes or longer. Wash in very hot water and polish as quickly as possible with an old soft cloth.

Make suds of good white soap by shaving part of a bar into an aluminum kettle containing water; let soap dissolve by boiling; then place silverware in kettle and boil for a minute or two, when it will be found clean and bright.

To distinguish silver from imitation; place both in a cup of hot coffee or water. The real silver one will get hot on the

end quicker than the other one, silver being the best conductor of heat known.

When you go away on a trip, dip your silver in paraffine so that a thin coating forms on it. The silver will be perfectly bright on your return.

A Good Silver Polish.

Use a little peroxide on a flannel, then rub on a little soap, and polish with a soft cloth. This is an easy method, and one that will keep silver clean much longer than most polishes.

Cleaning Ivory Handles.

Ivory handles that have become blackened may be cleaned by rubbing them with lemon dipped in salt. Then wash in warm water. Stained enameled pans can also be cleaned by rubbing them with coarse sand and lemon pulp then wash in warm water.

To Clean Silverware.

To clean silverware, place articles you wish to clean in sour milk, let stand twenty-four hours, wash and rub with dry cloth. Keep a lump of gum camphor near the silver to keep it from tarnishing.

Why Silver Tarnishes.

The reason silver which has been put away in bags or cases of white flannel turns black is that the cloth has been bleached with sulphur, and it is this which causes the metal within to tarnish. It is better to pack your extra forks or spoons away in dark blue or unbleached flannel such as jewelers use.

To Remove Egg Stains on Silver.

Salt and wet cloth will remove egg stains on silver.

To Brighten Mother-of-Pearl.

Mother-of-Pearl ornaments can be brightened by scrubbing them with a brush dipped in olive oil then polish with chamois skin.

To Brighten Silver and Glass.

If a little ammonia is added to water in which silver or glass ware is washed, it will brighten it wonderfully. Ammonia is good for removing grease from dishes, too.

A New Way to Clean Silver.

Beat to a stiff froth the white of one egg, and to this add enough soda to make a stiff paste. First wash and thoroughly dry the silver, then scour with the paste until all dark places are removed. Now rinse in cold water and it will be perfectly clean.

To Keep Nickel or Silver Bright.

To keep nickel and silver ornaments bright rub them with a woolen cloth saturated with spirits of ammonia.

To Keep Linen White.

If not used frequently, it should be taken out from time to

time and hung in the sun or washed with good white soap. The sun is the best bleacher.

Table Runners instead of Table Cloths.

These "runners" can be placed at right angles across the table and perhaps a small doily in addition at the right of each plate for the water glass. These are especially pretty in Summer and can be ironed very much more easily than the large cloth. Or there are many Japanese and novelty colored cloths in the shops which stay clean longer and which are also easier to iron than the regulation cloths of linen. A cloth of white cotton crepe joined together with bands of cluny lace, is most effective, and which not need ironing.

The Silence Cloth.

To Keep the silence cloth on your polished dining table from sliding out of place while adjusting the table cloth cut silence cloth size of table top, with allowance of two inches on each edge. Bind with a wide tape. Into this binding insert a narrow tape, to be used as a draw string. Place cloth on table, then pull ends of tape tightly into place and tie. This gives you a smooth, firm cover that can neither wrinkle nor slide out of place.

To Hem Table Linen.

Crease the hem as usual, then fold it back upon itself. Then overcast it. If the stitches are small, they will sink into the goods and be invisible when pressed out. This is a very rapid way of hemming. Cut squares from the best parts of old table cloths and hem them for napkins.

Buying Open Stock.

Open stock is the term used for that china whose patterns are kept constantly in the store and which can be replaced at any time. A "set" is the pattern of dishes which cannot be replaced except with great difficulty from the factory direct. It is always preferable to choose a pattern of open stock, so that when cups and sauce dishes are broken, or additional dishes are needed, they can easily be obtained. All the good china departments carry open stock.

Wooden Plates.

A supply of wooden plates, small paper dishes, and dainty paper napkins will save the trouble of sending out of the house your china and linen when remembering a friend with some of your good things. The recipient will be relieved that she has no dish to return or linen to launder.

Useful Plates.

Have you used the plates which are white polished cardboard and which look as beautiful as real china? Or the plates which come with paraffin lining, which do indeed save dish-washing in Summer—even at present prices? There are also deep dishes,

custard cups, glasses, sauce dishes and spoons made of paper, which you will do well to investigate.

Placing China.

Shelves for precious china may have pads of felt to prevent chipping the dishes. When fragile plates must be piled one on another a small, plain doily or round piece of blotting paper placed between will save breakage. Cups are safest hung on screws at the back of the dish closet. If you place dishes on top of each other, put pieces of blotting paper between them.

Milk for Cracked Dishes.

If cracked dishes are boiled in enough sweet milk to cover them for about forty-five minutes the cracks will glue together and become invisible, and the dishes will stand almost as much usage as when new. If the finish is badly cracked, throw the china away as it may poison food served on it.

To Prevent China and Glass Breaking.

It is a good idea to put a heavy Turkish towel on the bottom of the dish pan when washing fine china or glass.

Cracking of Plates and Dishes.

When plates and dishes have to be warmed in the oven, if a newspaper is placed underneath, it will break the heat and prevent the plates from cracking.

Never use hot water for china or glass which is decorated with gold. Glass should be left in water as little as possible.

For Broken Crockery.

White lead is one of the few cements that resists both heat and water. Apply thinly to the edges of broken pieces, press them tight together and set aside to dry. If you have a vase that is leaky pour hot paraffin inside coating the bottom and sides. This is a good thing to do with a new vase or bowl as a prevention to leaking.

To Mend Fine China Or Glassware.

When a valued piece of china or glassware is broken, clean the broken edges, apply some liquid cement and tie the broken pieces together firmly. After drying for twenty-four hours, it will be good for many years more use. The important thing is to have the pieces fitted exactly so no water can get in cracks and cause the pieces to drop apart.

The Care of Pretty Cut Glass.

A collection of pretty cut glass is the pride of a housekeeper. but unless these pieces are kept scrupulously clean they are less attractive than thin crystal. It is not a good idea to keep cut glass on tables or shelves when not in use, and it should not be stacked together, for even with the best of care the points will get broken. Salt and pepper shakers quickly show broken points because they are picked up together and carelessly handled. It is a good idea to keep whiting to clean cut

glass. Use a small bristle hand brush, dip it into the powder and rub the glass briskly. Powdered magnesia is equally good. If necessary to stack fine pieces have cotton mats, blotting paper or flannel to place between them. China may be buried in sawdust after washing and drying it. After an hour or so, brush the sawdust off with a soft brush, and polish with a cloth. Do not use sawdust from a resinous wood. Dry the sawdust and save for future use.

To Polish fine Glass.

Sift French whiting through fine silk gauze and put it in a fine gauze bag. Dust the glass thickly with it let stand, then wipe off with a clean dry cloth or wash cut glass articles in soft, warm water, to which a little bluing is added. Use a soft cloth in drying, and you will have a fine polish without rubbing. Never use hot water.

To Make Cutglass Shine.

Add a little bluing and a few drops of ammonia to a basin of lukewarm water. While each piece of cutglass is in the water brush lightly with a soft brush. Dry with a soft piece of cheese-cloth and polish with tissue paper.

To Mend Glass.

Dissolve half an ounce of isinglass in a little spirits of wine, add a table-spoonful of water; warm it slowly over the fire till it forms a transparent glue. Spread it nicely on the edges of the broken glass, unite them and in a few minutes the joining will be firm, scarcely perceptible.

Etiquette

PRACTICAL ETIQUETTE.

The Etiquette of entertaining has been founded upon conditions no longer general:—large houses, cheap food easily procured, and numerous servants. The house in many cases is a cramped apartment. Food scarce and expensive, and servants transient. So entertaining has lost much of its formal character. Many customs, founded upon artificial conditions, have vanished, but those founded upon kindness and consideration and convenience remain.

Everyone should know usages arising from kindness, but those formulated for convenience cannot be left to instinct.

First, deference should be paid to age at home, on the street, everywhere.

Consider the safety of others before your own convenience. Carry your umbrella, whether open or closed, with regard to others nearby and hat pins likewise.

Do not open a window in a car without the permission of those in line with the draught. Avail fanning so as to discommode others. Keep on the right of the side-walk, or street. Never take children where they have not been invited, and avoid crowding or pushing. Cultivate habits that smooth the path of social intercourse, such as orderliness, promptness, consideration, and above all, as Americans, you should cultivate poise. Assume leisure even if you are in hot haste. You will achieve your ends better than the flutterbuget beside you and save your nerve and those of others, and avoid accidents. A large share of energy and health are wasted by hurrying. Poise comes from self-control and leads to efficiency and it is a most important constituent of good manners. Poise does not mean inertia or laziness. It accompanies concentrated and controlled effort. It is the great need of American political life whose bane is ill-considered and hasty legislation.

The Dinner.

“A man eats, so is he”. (Frances Willard.)

Invitations to a formal dinner (or a wedding) should be sent out ten days before the event. Present conditions limit the courses of a luncheon or dinner, so do not therefore overload the table. In this matter American Hostesses are inclined to err; simpler menus are the rule abroad. Do not mistake elaborateness for elegance. Serve as far as possible from a side table or pass pantry. Keep the table as clear as possible. If the hostess is cook, let her choose a menu that can be largely prepared early in the day so she will not be flurried and overheated, before her guests.

Wait only fifteen minutes for a tardy guest.

In inviting a family, send one invitation to the husband and wife, one to the sons, and one to the daughters.

These invitations can be either engraved or written. The telephone has taken the place of the post in conveying many invitations, except for formal weddings, receptions, dances and dinners, it serves as a social carrier. This has induced a general habit of inexcusable negligence in acknowledging courtesies. Nothing shows true breeding more than promptness in sending immediate replies to invitations and notes expressing appreciation of courtesies received.

This is the first duty of The Guests.

The ladies must seat themselves immediately upon reaching the table. Gentlemen wait till the Hostess seats herself. Guest begin eating as soon as served.

Form Of Dinner Invitation.

Mr. and Mrs. A ——— B ———
request the pleasure of
Mr. and Mrs. C ——— D ——— 's company at dinner
May twentieth, at seven o'clock.

Form Of Acceptance.

Mr. and Mrs. Ralph Hayes
accept with pleasure
Mr. and Mrs. Hamilton Johns' kind invitation to
dine with them on
Monday the seventh inst, at seven o'clock.

Form Of Regret.

Mr. and Mrs. Ralph Hayes
regret that a previous engagement deprives them of
the pleasure of accepting the kind invitation of
Mr. and Mrs. Hamilton John for
Monday, May seventh.

If possible give a reason for refusing an invitation.

Have your guests enter the dining room in couples. This prevents the aimless embarrassed wandering toward the dining room that is apt to be the case when this is not done. It also enables you to place your guests properly and quickly even if there are no place-cards. These you should have for a formal dinner. The host must give his arm to the honored lady guest or, other things being equal, to the eldest lady. He places her at his right. The Hostess enters last with the husband of the lady the Host is escorting, or, failing that, with the most prominent gentleman present, or the oldest, and seats him at her right. The Hostess gives the signal to rise at the close of the dinner.

In serving the guests, begin at the right of the Host and so on around the table. Train the servants to be as noiseless as possible. Train servants to serve guest at their left. Don't apologize for anything.

Invite people who will be congenial to each other. Never a married man without his wife.

Don't indulge in extravagant entertaining even if you can afford it.

Don't arrange decorations that prevent the guests from seeing each other.

Don't select flowers with a strong fragrance.

Dont's For The Guests.

Don't be late, or come too early.

Don't neglect to remove gloves, and put them in your lap.

Don't use your knife except for cutting.

Don't use a spoon where you can use a fork.

Don't play with the table furniture or exhibit any form of nervousness.

Don't drink the soup from the point of the spoon but from its side.

Don't tilt your soup plate or any other dish.

Don't make any unnecessary noise eating.

Don't take large mouthfuls.

Don't eat rapidly.

Don't crumble your bread or play with the food.

Don't leave your teaspoon in your cup.

Don't eat vegetables with a spoon, but with a fork if possible.

Don't put potato skins or other refuse on the table cloth.

Don't hesitate to state your preference when offered it.

Don't pick a special article from serving dish, but take the nearest one to you.

Don't be greedy or finicky.

Don't take any food in your fingers except, bread, crackers, the bones of game, olives, artichokes, asparagus and delicacies like nuts and candies.

Don't eat cheese from your fingers but from a fork.

Don't neglect to wipe your mouth, before and after drinking.

Don't apologize for accidents while at the table, but later.

Don't appear to notice any awkwardness or mischance.

Don't talk scandal, shop, private affairs, religion, or any gloomy topic.

Don't chatter or monopolize the conversation. Don't be silent either as to be a wet blanket.

Don't fold your napkin unless the Hostess folds hers.

Don't neglect to make a dinner call very soon.

A WEDDING.**Invitation.**

Mr. and Mrs. A ————— B —————
request your presence at the marriage
of their daughter

C —————

to

Mr. D ————— E —————

Thursday, January Tenth
at 8 o'clock

St. Paul's Church—Chicago, Illinois.
1918.

Wedding Reception. (separate card)

Reception
462 Grand Avenue,
Nine to Ten o'clock.

Announcement. (separate card)

At home
Wednesdays in February
420 Chestnut Avenue,
New York.

Arrangements for weddings follow the individual taste of the participants, so they vary enormously, only the formal church wedding have stated form and conditions. Surely on this occasion, one might follow his own ideas and consult his own taste.

Certain matters are obligatory, however. The groom pays the clergyman. He also provides the bride with a wedding ring and with her bouquet, also a special present if he can afford it. He sometimes makes presents to the bridesmaids, also.

The bride's family provide all other expenses of the wedding breakfast, reception, etc. They also provide the bride's trousseau and usually they provide her with a generous supply of linen.

Gifts are usually sent direct from the shop to the bride's home.

The bride acknowledges these by letter.

The custom of exhibiting the gifts seems to be going out.

LIST OF WEDDING ANIVERSARIES.

One year.....	Cotton
2 "	Paper
3 "	Leather
4 "	Wooden
7 "	Woolen
10 "	Tin
12 "	China

15	“Crystal
20	“Linen
25	“Silver
50	“Golden
60	“Diamond

ETIQUETTE IN THE FAMILY.

Don't scold or nag.

Don't be extravagant.

Don't be autocratic.

Don't interrupt others.

Don't repeat gossip or scandal.

Don't lose control of your temper.

Don't neglect home and family for anything.

Don't reserve your good manners for guests.

Don't correct by ridicule or sarcasm.

Don't open anyone's letters without permission.

Don't be careless in money matters.

Don't forget that humor will counteract ill temper.

Don't discuss family affairs outside the home.

Don't be hard, unyielding or unforgiving.

Don't use coarse or vulgar language in the home.

Don't exaggerate the importance of little things.

Don't minimize the importance of little things.

Don't make home unnecessarily dull and uninteresting.

Don't dwell on grief or harp on misfortunes.

Don't be grouchy at table; it is conducive to indigestion.

Don't deceive, as confidence can never be fully restored.

Don't correct anyone except children and them only in private.

Don't be unkind, over-exacting, or supercilious to servants.

Don't blame so severely for careless as for intentional wrongdoing.

Don't omit anything that can promote harmony and co-operation in the family.

Don't hesitate to sacrifice yourself, but not to the point of making others selfish.

Don't cultivate the habit of worry or neglect that of cheerfulness.

Don't be critical of others, or slack with yourself.

Don't neglect the interchange of little courtesies in the home.

Don't quarrel, if you can avoid it, be reconciled as soon as possible else the husband is unfitted for business, the wife for her duties, and the children are undermined in health and disposition.

A Good Motto: Work as tho you would live forever. Live as tho you would die today.

GEORGE WASHINGTON'S RULES OF CONDUCT.

Let your discourse with men of business be short and comprehensive.

In visiting the sick do not presently play the physician.

In the presence of others sing not to yourself with a humming noise, nor drum with your fingers or feet.

Read no letters, books or papers in company.

Come not near the book or writings of anyone so as to read them, unless desired.

Let your countenance be pleasant, but in serious matters somewhat grave.

Show not yourself glad at the misfortune of another, even though he were your enemy.

Strive not with your superiors in argument, but always submit your judgment to others with modesty.

When a man does all he can, though it succeeds not well, blame him not that did it.

Mock not nor jest at anything of importance; break no jests that are sharp-biting, and if you deliver anything witty and pleasant, abstain from laughing thereat yourself.

Use no reproachful language against anyone, neither curse nor revile.

Associate yourself with men of good quality, if you esteem your own reputation.

Be not immodest in urging your friend to discover a secret.

Speak not of doleful things in time of mirth, nor at the table.

Break not a jest where none takes pleasure in mirth.

Laugh not loud, nor at all without occasion.

Treat with men at fit times about business.

Whisper not in the company of others.

Make no comparisons, and if any of the company be commended for any brave act, commend not another for the same.

Be not curious to know the affairs of others, neither approach to those that speak in private.

Undertake not what you cannot perform but be careful to keep your promise.

Be not tedious in discourse.

Speak not evil of the absent, for it is unjust.

Let your recreations be manful, not sinful.

Calling.

Clubs, charities and business have conspired to fill the lives of women so full as to exclude the old custom of calling very largely. However, dinner calls must be made, and calls upon newly weds, out of town guests, and invalids. In this again kindness dictates social usage, for these calls are in the one case an acknowledgment of a courtesy, and in the others they represent a courtesy to those who may be strange or lonely or ill.

Etiquette Of Business.

Business has invaded the home so the home-maker must prepare herself accordingly.

Household accounts should be systematized. Daily bills should be hung on hooks provided for them.

Receipted bills should be kept carefully.

Providing the table from a stated allowance tends to promote business habits.

Pay all bills that you can by check.

Keep the stubs in your check-book filled out in an orderly manner.

Settle all debts as promptly as possible.

Keep receipts for at least two years.

In addressing a firm, use this form:—

Messrs. James Anderson & co.,

Gentlemen:—

Write every business letter plainly and concisely. (not curtly.)

Never keep washer-woman or anyone dependent upon a daily wage waiting for her money.

Always be courteous in all dealings.

Never buy on credit if you have the cash.

Never endorse a note unless ready to pay the full amount.

Never waste anyone else's time. A clerk is paid to wait on those who intend to buy.

Business letters must be answered by return post.

When enclosing stamps do not stick one corner to the letter.

Put them in loose. They can't get out of a sealed envelope.

Correspondence Etiquette.

Use good ink, pen and paper.

Address on envelope:—

Write Mr. James Andrews or

James Andrews, Esq.

Address a clergyman Rev. John Page Andrews, D. D.

Address a physician James Thompson, M. D.

Their wives are addressed just like other women.

To address more than one person write, Messrs.—Misses, or Madames.

Mode of addressing a letter:

In the case of strangers "Madam" for all women and "Sir" for gentlemen; or "Dear Sir" and "Dear Madam".

example: James Brown, Esq.,

Dear Sir:—

Brown, Dodge, & Co.,

Gentlemen:—

Mrs. Burton Jones,

Dear Madam:—

In case of acquaintances and friends simply write,
My Dear Miss Brown,

SIGNATURE.

To strangers: Very truly yours, or Respectfully yours.

Sign every letter in full and distinctly. Never sign Miss Brown—Mrs. Jones. Married women sign in full.

“Margaret,” and in brackets (Mrs. James Field).

Return address;

Put name in upper left hand corner of envelope or else on the flap at the back.

Miscellaneous Hints.

To Acquire Grace of Manner.

Forget your own feeling of self-consciousness. Be careful of your movements when alone and unconscious of them when in public. Try to acquire poise and serenity. Did you know that the late Heinrich Conried, when asked to describe a beautiful woman said: “That is simply, She is harmonious.” If you knock over a chair do not act embarrassed. Pick it up as matter-of-fact as possible. Don’t allow your feet to drag, but set them down firmly and you will not stumble or make false steps.

Men’s Dress.

Full evening dress is correct costume for any sort of evening affair after 6 o’clock, if ladies are to be present. The Tuxedo coat, worn with the inevitable black tie, for use at dinners when men only are to be present.

A Broken Engagement.

All presents should be returned without further loss of time. engagement has been broken. The mother should announce the breaking of the engagement to as many friends as possible, either by a worded explanation or by a brief note. As little as possible should be said about the entire matter, except to intimate friends. Even then it is wise to refrain from discussing it at length.

The Bride’s Cake.

The wedding cake is baked entirely separate from the bride’s cake, which can be served by the prospective bride a day or two before the ceremony is to take place. At this dinner no men are supposed to be present, only the bridesmaids and a few most intimate friends of the bride. It is in this cake that the historic thimble, coin and ring are hidden. And the young women who chance to find these trophies in their slices of cake are destined respectively for a life of single blessedness, wealth and a state of enviable domestic bliss.

At Your Daughter’s Debut Party.

In the receiving room you should take your stand nearest the entrance. Your daughter should stand between you and her father. As you greet the incoming guests in turn you can then present your daughter. At the supper her father or brother should take her into the dining room. If the brother does

this, then your husband can take in some distinguished elderly lady to whom you desire to show especial consideration.

Miscellaneous.

Avoid loud talking on all occasions. Do not introduce people indiscriminately.

Extend the courtesy of a bow to all your acquaintances without distinction of age or rank.

Never "cut" anyone without the most serious and certain cause.

Do not neglect to introduce children. It makes them less awkward.

Expenses and Economics

The Efficient House Keeper.

House-keeping should be conducted on business principles, as any other career. One reason for failures in married life is that so many girls enter into marriage, which has its business side, with no preparation whatever for that side. A man who would go into business with as little preparation for it as a woman goes into marriage would be called a fool.

House-keeping needs efficiency and efficiency is manifested by right ideals about house-keeping, studying the correct way of performing each task, elevating the work as much as possible out of drudgery by studying modern conveniences, selecting the right tools, planning the work so time is economized, keeping business like records and learning how to manage.

Household Schedule.

Have a schedule and it is easy to do this because the same things re-occur practically every day in house-keeping. Orderliness, when not carried to excess, is the greatest aid to the house-keeper. If a person has a place to keep things, the things will, automatically, be put away in that place. There is no use having a thing unless you can find it. It is only irritating. Children should be made to pick up their own things.

If the family is a large one of adults, it would be well, early in the game, to call them together and by a majority of votes establish hours for meals, et cetera, and the others would be honor bound to keep the rules or go without. Exceptions should be made for extraordinary occasions. The house-keeper, in making up her own schedule, should take into consideration the comfort and happiness of her own family.

Care Of Bills And Sales Checks.

Avoid disputes with trades people by taking a receipt or sales check when you buy goods for cash. Also save all sale checks left at your house by sticking them on a bill-hook or better still keep a series of envelopes in a convenient box or file; one for each person with whom you run a credit account and then check up at the end of each month.

Household Accounts.

The principal purpose of keeping accounts are to find out where your money is going and to teach economy. These accounts can either be kept in an inexpensive ledger or you can buy a card index box and keep your accounts on cards. An hour spent with a bookkeeper friend will be well spent.

Carrying Parcels.

As it costs a great deal of money these days to maintain automobile delivery trucks, it is obvious a store keeper can sell goods to you cheaper when you carry them home. Conversely, you can not expect to buy things as cheaply from the store

keeper when you put him to the expense of delivering and then collecting.

Shelf Paper.

Instead of always buying shelving paper it is cheaper to buy coarse torchon lace the desired width, sew on a piece of tape and tack on the shelves. When dirty wash. Better still; keep your shelves well painted as it is more sanitary and they can be kept clean by washing.

Reducing Gas Bills.

You can save a large percentage of your gas bill. The small oven sitting on one burner will hold almost an entire meal for the average family. After the oven is thoroughly heated, turn down the burner one-half. Most house-keepers burn too much gas by turning burners up too high when one-half the flame would do the same work. Experiment on this until you learn it for yourself.

Housework Schedule.

If you will designate certain days in the week for regularly doing certain things, you will find it easier to prepare for them and you will not forget them. Here is a suggestion.

Monday. Brush up after Sunday, mend soiled linen, soak clothes, market for and prepare Tuesday meals in advance while preparing Monday meals. Tuesday. Wash clothes, wipe bathroom and kitchen. Wednesday. Iron and lay away clothes, market for Thursday. Wednesday. Iron and lay away clothes, market for Thursday. Thursday. Sewing, wipe bathroom. Friday. Baking, clean bedrooms, market for Saturday and Sunday. Saturday clean living rooms, bathroom and kitchen, clean silver, generous dinner Saturday night, so only light meals Sunday.

To Reduce Plumber, Gas And Water Bills.

Once every two weeks draw off the water through the faucet at the bottom of your kitchen boiler. It will be very rusty and this rust eats out the pipes in your kitchen.

Look for leaky joints on your stove. They not only make the air foul but waste gas as well. A plumber in a few minutes can fix these.

Leaky faucets in a house, although the leaks may seem small, mount up in a year to a waste of some ten to twenty dollars. Have them fixed at once.

Housekeeping Allowance.

Every husband and wife should jointly understand their finances and agree how to spend the money. The wife at home should do the buying and keep the accounts. If the husband is drawing a regular salary he should make the wife a regular allowance. No family should run bills unless they see their way clearly before hand to pay them. It is dishonesty otherwise.

Nothing lessens the family standing in a community more than non-payment of bills.

Efficient Tools Make Easy Work.

Invest in good modern labor and fuel savors. A high stool at ironing board and elsewhere saves standing. A fireless cooker, a stationary egg beater, glass baking dishes, baking pans of heavy metal, and a dish washer in a large family same time. They are investments. Housekeepers should consider housework as a business. Keep a purse of small change handy and save trouble. Use good tools and intelligence and house work will be easy.

Care of Food

Food.

That which is fed upon, digested, and absorbed into the blood, furnishing nourishment for the body. Food used to form the tissues and fluids of the body, to repair the tissues of the body, stored as fat, for future use, and as fuel, giving warmth and energy to the body.

Eat Anything You Like.

The noted food specialist, Dr Woods Hutchinson says: properly made bakery pies are healthful, mothermade pies are too soggy in crust.

Very hard boiled eggs are fine for digestion and are better than soft boiled ones because you chew them more. Eat steak often, as the simple dietetic life is wrong. Late suppers do not shorten life but give muscle to arms and legs and tint to the face. Meat is the main thing, fruit and vegetable balancers.

He suggests the following menus: Breakfast, eggs and ham or bacon or meat hash, fruit with sugar and cream, a cereal with cream and tea or coffee. Lunch, a few oysters or fish, or an omelet, a cheese preparation with bread butter and potatoes, and fruit and pie or cake. Dinner, soup as it smells nice and starts the juices, then oysters or fish as introduction to the meal, then roast beef or mutton or chicken, with vegetables, then fruit and pie.

General Hints.

"Efficient Housekeeping", means planning and method and more time for rest. Cook on Saturday for Saturday and Sunday, with big dinner Saturday and light meals Sunday. Don't market every day. Plan meals ahead, buy in quantities, and save time and money.

Write to Department of Agriculture, Washington for list of Farmers Bulletins, including preparation of foods etc. and then pick out the bulletins you wish. They are either free or cost 10 cents each.

Danger of Unprotected Food.

Chemical analysis revealed in raisins exposed for sale in Philadelphia; pieces of prunes, rice, beans, strands of hair, cut fur, cotton, wool fiber, straw, insect wings, cigar ashes and bits of cigarette paper. Food sold from uncovered stands is not good.

How To Keep Food Stuff.

The right temperature at which products should be kept is most important. Oils of all kinds should be kept in a cool but

not cold place. So should spices, tea, coffee and similar substances, also crackers and cheese. Heat encourages the presence of insects and dries open packages of raisins, etc. Keep all such articles in glass-covered jars, like Mason jars, or in drug store square bottles, or in tin containers.

Beef. Sprinkle with pepper, dredge with flour and keep in cool place.

Bread. Place in crock or tin box.

Crackers. Keep in tin box.

Beans. Keep in bags or crocks.

Flour. Cover well, keep cool and dry.

Butter. Keep from air and from disagreeable odors.

Winter Apples. Wrap each one in tissue paper to prevent contact, or keep in barrels, airtight, in a cool, dry place.

All Fruits. Wrap in tissue paper and keep cool.

Potatoes. Keep in cool, dark, dry place. New potatoes will not keep long.

Cereals. In crocks or covered glass jars.

Milk. It may be scalded to keep or a pinch of borax added, or wrap bottle in wet cloths. Keep wet.

Veal. Spoils sooner than beef. Pork is not safe to use in warm weather.

Shriveled Walnuts. Can be restored by soaking well in water before shelling them.

To Save Rancid Butter. Mix a pound of butter with teaspoon of salt and a pint of cold water. Scald, cool, and skim off the butter.

Buy baking powder in large cans, then fill small ones from it. Discarded cans are fine for keeping cereals in.

WEIGHTS and MEASURES.

Table of Weights and Measures.

2 Cups Butter (packed solidly) 1 lb.

4 Cups Flour (pastry) 1 lb.

2 Cups Granulated Sugar 1 Lb.

2½ Cups Powdered Sugar 1 Lb.

2¾ Cups Brown Sugar 1 Lb.

2¾ Cups Corn Meal 1 Lb.

2 Cups (scant) Rice 1 Lb.

4 Cups Coffee (ground) 1 Lb.

2 Cups Finely Chopped Meat 1 Lb.

1 Square Baker's Chocolate 1 Ounce.

3 Teaspoons (level) 1 Tablespoon.

16 Tablespoons 1 Cup.

Legal Weights.

Send for a copy of your state or city weights and measures regulations and see what is the legal Size that containers must be stamped on. In buying by the bushel, see that products are

weighted, instead of measured. For instance, sixty pounds of potatoes are a lawful bushel in some States, and so many pounds of apples, tomatoes, etc., in others.

Measurements.

To obtain good results in cooking, careful and exact measurements are necessary.

1. A spoonful of any material is a level spoonful.
2. Always use a smooth, hard surface, like the back of a case knife, for obtaining a level spoonful.
3. Half a spoonful is a spoonful divided lengthwise.
4. A cupful is a cup filled level with the top.
5. Flour, meal, soda, powdered and confectioner's sugar, should be sifted before measuring. Mustard and baking powder should be stirred to lighten.
6. To measure dry material by the cupful place it by spoonfuls in the cup, round slightly, and level with a case knife, without shaking the cup.
7. To measure butter or lard, pack solid.

Weights and Measures for Use in the Pantry.

- Ounce of granulated sugar equals two level tablespoonfuls.
- Ounce of flour, four level tablespoonfuls.
- Ounce of butter, two level teaspoonfuls.
- Ounce of ground coffee, five level tablespoonfuls.
- Ounce of cornstarch, three level tablespoonfuls.
- Ounce of thyme, eight level tablespoonfuls.
- Ounce of grated chocolate, three level tablespoonfuls.
- Ounce of pepper, four level tablespoonfuls.
- Ounce of salt, two level tablespoonfuls.
- Ounce of mustard, four level tablespoonfuls.
- Ounce of cinnamon, four level tablespoonfuls.
- Ounce of mace, four level tablespoonfuls.
- Ounce of curry, four level tablespoonfuls.
- Ounce of chopped suet, a fourth of a cupful.
- Ounce of olive oil, two tablespoonfuls.

To measure flour, meal and similar ingredients, sift lightly into the measure and then level.

To measure lard, pack into cup or spoon and level with knife.

To measure a spoonful of dry material, fill the spoon heaping, then level.

To measure half spoonful, fill, level spoon, then divide into halves lengthwise.

MILK AND BUTTER.

Food Value.

For an infant milk is almost a perfect food. It contains all the food to build up the body. Milk contains much lime and water proportion to the other principles for older people, and too little sugar.

1 Cream. When milk stands tiny globules of fat rise to the top in the form of cream. From this cream butter is made.

2 Curd. When the cream has been taken from milk, and the milk sours, part of it forms into a solid mass called the curd. This curd is the casein of the milk and from it cheese is made.

Good milk is yellowish white liquid, having a slightly sweet taste.

Skim milk is poor in fat but rich in casein and albumen, and may be used in cooking.

Sour milk is caused by an acid in the milk. Bacteria feed upon the sugar and cause it to ferment. This forms an acid which hardens the casein and makes the curd of sour milk.

To test Milk.

Dip a well polished knitting needle into milk, and immediately withdraw it in an upright position.

If the sample is pure, some of the fluid will hang to the needle, but if water has been added to the milk, it will not.

When Boiling Milk.

Put a little water in the kettle in which milk is to be heated to prevent scorching. Sprinkle in a little granulated sugar and let it get hot before pouring in the milk.

To Prevent Milk Burning.

Put water in the pan and let it boil; then pour out water and pour in the milk immediately.

Using Scorched Milk.

Pour scorched milk into a clean vessel and when cold the burned taste will be gone.

To Whip Thin Cream.

Add the white of an egg to each pint of cream.

To Whip Cream Quickly.

Chill cream thoroughly first and it can be whipped in half the time. Ordinary cream whips readily if chilled for a few hours.

When Cream is Scarce.

A good substitute for whipped cream is made by mixing finely sliced banana with white of an egg and beating thoroughly until banana is all dissolved. Sweeten and flavor as desired.

Mock Whipped Cream.

One cupful of milk, sweetened to taste; one scant teaspoonful of flour, stir in milk and cook until thick like cream. Have whites of two eggs beaten stiff, pour boiling cream over eggs and beat for a minute or two.

Preserving Milk and Butter.

Milk always contains bacteria. But as they will increase much less rapidly or cease to multiply altogether when the milk is kept at a low temperature.

Milk will keep sweet and pure only a short time unless carefully handled. Always take milk into the house as soon as possible, especially in hot weather; before putting it in the refrigerator cool it to as low a temperature as possible by placing the can or bottle in cold water.

The refrigerator where milk is kept should be thoroughly cleaned at least once a week. Only covered dishes absolutely clean and sterile should be used for milk. Milk dishes should be scalded in boiling water for five minutes and then inverted on a clean shelf without wiping.

Pour milk from one vessel to another as little as possible. Never mix new milk with old, or warm with cold.

Tops of bottles should be washed before removing the milk, for they are liable to become contaminated in transportation. Each milk bottle or can should be made thoroughly clean and sterile as soon as it is empty.

To Keep Milk Fresh.

To every quart of water add a dessertspoonful of boracic acid, and keep in a bottle tightly corked. Add one or two tablespoonfuls to every quart of milk. This will keep milk sweet for twenty-four hours, even in the hottest weather.

To Keep Butter Firm.

Butter will remain firm, even in a hot kitchen, if a cloth wrung out in cold water be placed over the top and around the sides of the butter dish and the dish placed where there is a draft. Don't put butter in the refrigerator with the wrapping on it.

To Preserve Butter.

Fill the pot to within an inch of the top, and lay on it common coarse-grained salt, to the depth of one-half to three-fourths of an inch, then cover the pot with any flat article. The salt will run to brine. Remove by turning the pot on its side.

CARE OF MILK.

Keep milk in absolutely clean dishes.

Put in a cool place.

Do not keep near strongly flavored foods.

Preserving Of Milk.

Scalded. Heat the milk over hot water or in a double boiler. When it has a bead-like ring around the edge it is scalded. This is the most digestible way of heating milk.

Boiled. Boiling milk kills all bacteria, but hardens the casein and albumen, making the milk hard to digest.

Condensed. Water is removed by evaporation. Then the milk is put into sterilized cans while hot and scalded.

Sterilized cans or dishes have been heated or boiled until all germs are killed.

Keeping Milk Sanitary.

Procure special celluloid milk bottle caps which can be adjusted to any milk bottle. Being washable they can be kept sterilized. They can be procured at a house furnishing store.

Stone Jar Keeps Milk Cold.

Milk will keep fresh longer in a stone jar that has been chilled than in a bottle. The jar must be closed at the top with a paste-board tip which fits closely.

Imitation Butter.

Boil fat in a pan of water. When cold scrape off sediment on bottom of cake of fat. Return clean cake to fire and heat slowly. When hissing begins drop in a piece of raw potatoe. When potatoe is brown and no water remains strain thru cheese cloth. Before using, add salt and lemon juice and cream with a little sugar.

MEAT.

General Hints.

Meat is the flesh or muscle of animals, used for food. The toughest muscles contain the largest amount of juice and have the best flavor. The most expensive cuts are from the part where the muscles are but little used, which makes finer grained and more tender meat.

Meat is a nitrogenous and strength-giving food. It builds and repairs tissues. We cook meat to make it taste, and look better. Meat should be removed from the paper as soon as it comes from the market.

Cleanse meat by wiping with damp cloth; do not wash unless absolutely necessary, when use salt water.

Principles of Cooking Meat.

1. Extract juices and flavoring matter into water, as in soups and broths; or,
2. Have nutriment partly in meat and partly in water, as in stews; or,
3. Retain nutriment within meat, by quickly coagulating juices in outer surfaces, as in roasts and steaks.

BEEF.

Good beef should be firm to the touch, bright red in color and have no unpleasant odor. It should not be eaten as soon as killed, but should hang for two or three weeks.

The beef creature is devided by splitting through the back-

bone in two parts each part being called a side of beef. Each side is divided into two parts, each part being called a side of beef. Each side is divided into the fore and hind quarters.

FORE. QUARTER.

- 1 Neck, Stews.
- 2 Chuck—Steak, Pot roast, Roast.
- 3 Prime of rib—Best roast.
- 4 Brisket—Soup, Pot roast.
- 5 Fore Shin—Soup stock, stews.

HIND QUARTER.

- 6 Porterhouse Steak—Hip-bone.
- 7 Sirloin Steak—Flat-bone, Round-bone.
- 8 Rump—Pot roast, Stewing, Roast.
- 9 Hind shin—Soup.
- 10 Flank—Braising.
- 11 Round—Steak, Stews.

Frying Bacon.

Soak it in water for three or four minutes. This will prevent the fat from running, and will make bacon go further.

Tough Steak Made Tender.

Place tough round steak in one pint of cold water in which a tablespoonful of vinegar has been stirred. Leave for ten minutes and steak will be as tender as spring chicken, without vinegar taste.

Place meat that is slightly turned, in water into which a small amount of baking soda has been dissolved, and it will be fresh and good.

BOILING HINTS.

Average time for boiling fresh meat is from 18 to 20 minutes per pound. Salted meat requires more boiling and water; fresh-killed meat longer time; all meats longer in cold than warm weather. It is, however, better to be guided, by the thickness of the joint than by its weight.

Dried or salted fish and meats require soaking in cold water before boiling.

Meat and poultry will lose flavor and firmness if left in water after they are done; fish also, which will break to pieces.

Save the water in which fish, meat, or poultry has been boiled, to make soup.

Boil all meats slowly, as fast boiling makes them hard and tough, darker color and less savory.

Cover the joint with water; above this quantity, the less water the more savory.

When meat is put on in cold water, it should be heated gradually, not to boil in less than forty minutes. If it boil

sooner, meat will shrink, become hardened, and not throw up scum as freely.

When a pot boils, remove it nearly off the fire, leaving lid on. A very little heat will then keep up the boiling.

Frying Baskets.

Use for all delicate frying, avoiding handling; and lift all things out at the same moment.

Preserve Meat in Summer.

Meat can be kept in summer for a longer time if thoroughly rubbed with olive oil or butter and put away in the refrigerator.

To Make Meat Tender.

A cut lemon instead of vinegar will make tough meat tender. Rub thoroughly and let stand three or four minutes before cooking. Don't salt meat before the cooking. Add salt after meat is cooked, or when nearly done.

To Make Gravy Brown.

A tablespoonful of coffee added to gravy will make it brown immediately without leaving taste of the coffee.

A Gravy Hint.

When thickening gravy, beat flour and water together with Fork until smooth as cream.

Making And Saving Frying Grease.

Take fat from top of water in which meats are boiled. In roasting meats, pour out grease before it burns, just before meat is done.

Fat that comes from pork, veal, chicken or beef can be rendered and used for cooking. Strain the grease through cheese cloth. To melt beef-fat or suet, cut in small pieces and set over a slow fire, or in a moderate oven in an iron pan. As soon as it begins to melt, skim melted part off with a ladle, and put in a stone jar. Melted suet or fat is good for French frying, and mutton is less likely to burn than beef. Mixed lard and beef suet are best for doughnut frying.

Fat too hot smokes. Test with an inch cube of potato, to see if it becomes evenly browned at once. Vegetable oils for deep frying smoke less than animal fats.

Absorbing Surplus Grease.

Take up fried potatoes or croquettes or anything greasy on a doubled piece of butcher's brown paper, which absorbs the grease quickly and makes them more digestible.

FISH.

Cleaning Fish.

Before cleansing fish dip in hot water, and the scales will be very easily removed.

To Freshen Salt Fish.

The quickest and best way to freshen salt fish is to soak it in sour milk. It brings out the delicate flavor.

Buying Fish.

Fish which is fit for food invariably has a shining skin, bright eyes and gills of vivid red.

In buying haddock, cod or other similar varieties, get fish with small heads and broad shoulders tapering toward the tail. The long, lanky, dull-looking fish is lacking in flavor and nourishment. With the flat varieties of fish, such as sole, the underside should be bright and free from discolored spots.

The expert can tell best by the odor. The best fish has an odor like seaweed fresh and sweet.

Clams and Lobsters.

The time required for digesting clams and lobsters varies in different individuals. If good and fresh, they will digest in from two to four hours. There are parts that are sometimes tough. The neck or head, and those parts are sometimes cut away. If clams and lobsters are bad they will produce symptoms of poisoning within a very short time. Illness might not arise for thirty-six hours, but such cases would be very rare. A person troubled with constipation is much more likely to be made ill after a long period. Clams are more of a luxury than a balanced food.

Oysters are not good if they open easily with a knife.

Lobsters. The heaviest are the best.

Fresh Oysters can be eaten in any month that has an "R" in it: that is, all except May, June, July and August.

POULTRY AND GAME.**Lighten Poultry Cleaning.**

Dip a heavy piece of material in scalding water, wrap same around fowl tightly, leave for ten minutes, remove, and picking pin feathers will no longer be a task.

To Make Fowls Tender.

If a turkey or chicken is rubbed inside and out with lemon it will make the meat white, juicy and tender.

When Roasting a Turkey.

Turkey need not be sewed after the dressing has been put in. Insert toothpicks on either side and string back and forth over the picks. This is easily removed after the bird is cooked.

FRUITS.**Fruits in General.**

Fruits have little nutritive value, but are good for impaired

digestion. In combination with simple grain preparations, or on an empty stomach, they are healthful, and agreeable. If eaten with vegetables or at the end of the meal, the effect is not beneficial. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter, engendered by too much flesh food. The apples, pear, or plum, when eaten ripe without sugar, diminish acidity. Their juices are converted into alkaline carbonates which counteract acidity.

Fruits when fresh and ripe will purify the blood.

As specific remedies, oranges are aperient. Sour oranges are highly recommended for rheumatism, watermelon for erysipelas and yellow fever, cranberries for erysipelas used externally and internally, lemons for feverish thirst, biliousness low fevers rheumatism, colds, coughs, liver complaints, etc.

Blackberries are useful as a tonic and in all forms of diarrhoea. Tomatoes are a powerful aperient for the liver, a good remedy for dyspepsia and indigestion, and are invaluable where the use of calomel is indicated.

Figs are valuable as a food for those suffering from cancer, used externally and internally.

Bananas are good for chronic diarrhoea, pieplant for rheumatism and to purify the blood.

The most nutritious fruits are, the banana, date, fig, grape and prune on account of the sugar they contain. Fruits to counteract constipation are apples, berries, figs, peaches, and prunes.

Pineapples.

The pineapple is about the most beneficial fruit, containing mineral salts in large proportions which flush the system and enrich the blood. It is invaluable in stomach trouble as it easily digests its contents. It is very good in cases of catarrh and sore throat, and possesses germicidal properties.

When served fresh it should be scalded before combining with puddings or gelatines. It is very beneficial eaten raw, without sugar.

To select one, pull out a few leaves from the top. If they come out easily it is ripe. Never serve cream with raw pineapple as it produces a bad acid.

To store pears for winter.

Rub pears with a little grease or lard, and place on cupboard shelf. This will prevent decay.

When cooking cranberries.

A quarter of an apple cooked with each quart of cranberries lessens the crudeness of their flavor but not their tartness.

More salt, and less sugar.

In cooking very sour fruits, use a little salt, and much less sugar will be needed.

To freshen lemons.

Old and dry lemons may be made fresh and juicy by leaving them in a pan of hot water, for two hours, at an even temperature.

A cold bath for rasins.

Wash in cold water before chopping. They will be in better condition.

Raisins.

Raisins are a pure, useful fruit. They may be eaten raw by adults, stewed by children. Added to bread and pies and stewed slowly, with a little cinnamon or ginger added, but no sugar, they are palatable, fattening and laxative.

Chopping fruit.

When running dates, figs, or raisins through a food chopper, add a few drops of lemon juice to prevent the fruit from clogging the chopper.

Heating Lemons.

A lemon will yield almost twice as much juice, if heated before squeezing.

Use squeezed lemons.

Pieces of squeezed lemons, are handy in removing stains. Dipped in salt they will scour copper kettles and brass work. They will remove the odor of fish and onions.

To Peel oranges.

When slicing oranges, pour boiling water on them, and let stand five minutes. The white lining will come away with the skin.

Wooden spoons for fruit.

When stewing fruit use only a wooden spoon. A short handled one is the most convenient for thick substance. A wooden paddle is fine for marmalade.

To prevent mold on canned pickles.

Small pieces of horseradish roots placed in the tops of jars or bottles will prevent mould on pickles, green tomatoes or chow-chow.

Catsup begins to work.

If catsup begins to work take equal amounts of working and good catsup, put into kettle add sugar, and boil.

To prevent fruit from gathering mold.

Place a box of lime in closet in which fruits are stored.

When making jam.

A teaspoonful of glycerine added to every four pounds of jam a quarter of an hour before boiling is completed will remove the foggy appearance and make the jam transparent and firm.

CANNING.**A new and easier way of canning.**

Sterilize jars, (those with tops preferred.) Fruit jars are not sterilized unless boiled fifteen minutes. While jars are sterilizing, prepare fruit by making syrup, to taste, boiling same, thoroughly.

Put raw fruit in jars, add hot syrup until full. Put on rubbers, or screw tops, tightly. Then put jars in enough boiling water to cover tops of jars. Cover tub, let stand over night, when fruit is ready to put away.

Rubbers for jars should be new. Soften in warm water before using. Sterilize covers.

Choose wide-mouthed jars, having glass tops and rubbers, with a snap spring fastening, or jars with metal caps having composition rubbers in the caps.

Send to Department of Extension, Department of Agriculture, Washington, D. C., for the new series of "N-R." leaflets. These are up-to-date helps in canning; and cost only five cents apiece. There are six bulletins, on every phase of canning fruits and vegetables.

To Keep Canned Fruits.

A double walled-closet in a fireless room is the best place for storing in winter, and a cool room for summer.

To cover jelly.

Use parowax. Not having parowax cut white paper, size of top of jelly, and dip in white of egg, alcohol or brandy, and lay on jelly.

To label jelly.

The best method is to write the name on a card, or slip of paper and drop on the hot parowax you have covered jelly with.

Gummed labels may be obtained at grocery or book stores.

To cover jam.

Cut two covers, from good toilet paper, for each jar, allowing an inch on each side. Dip one paper in boiled milk, and cover jar; in five minutes dip the second in the milk, put it on jar, press carefully, and tie.

Paraffine for Jelly.

Melt paraffine in vessel of hot water, pour it over jelly, as soon as jelly is used. Remove paraffine when jelly is wanted,

wash and save for another time. To use old paraffine boil over water, and cool. The dirt can be poured off, and the paraffine be as good as new.

To prevent mold.

Cover surface of jelly, after it is cold $\frac{1}{4}$ inch deep with powdered sugar.

To turn jelly out of a mold, whole.

Dip glass in hot water, and contents will come out unbroken.

To open a glass jar.

Hold a hot cloth around the jar.

To Make A Jelly Bag.

Fold the opposite corners of a piece of heavy cheese cloth $\frac{3}{4}$ yard long. Sew in shape of cornucopia, rounding at end. Fell the seam to make more secure. Bind with tape and make 3 heavy loops by which to hang it.

Miscellaneous.

Five boxes of currants will yield nine glasses of jelly.

7 lbs. of peaches will make 15 glasses of marmalade.

4 quarts of quinces will make 10 glasses of jelly.

4 quarts of crabapples will make 10 glasses of jelly.

6 lbs. of peaches will make 8 pints of preserved peaches.

Apple jelly can be made from the parings of apples alone, and will be a fine red color, no matter what color the parings are.

Paper cups or glasses are fine to put up jelly in the country, which must be brought to town, as they do not break and are less heavy. They come in four different sizes, and are fitted with lids and are to be paraffined as usual.

DRINKS.

Water.

Water acts as a solvent for food, furthers the process of digestion and aids absorption. No food is ever fit for the body's needs that has not been properly liquified. Water assists also in the muscular movements of the intestinal coats and in the right drainage of the digestive tract; and it restores the bodily fluids lost through the skin, the kidneys and the lungs (watery vapor). Much more than half our bodies is water. Don't put ice in your drinking water. Cool the water by putting it near the ice.

Coffee.

The housewife who spends the most for her coffee does not always make the best. An amateur might make an inferior cup from the most expensive coffee.

The ambitious housewife soaks her ground coffee over night, or for several hours, thereby preserving its true flavor. The

cheapest grade of coffee, soaked, will produce a cup of refreshing beverage, and less coffee may be used.

Coffee Sugestions.

Coffee must first come to a boil, and then simmer. A shiny coffee pot will keep coffee hot, longer than a dull one.

Try adding a pinch of salt to desired amount of coffee.

Test the Purity of Coffee.

Pour cold water on it. If the water assumes a brownish hue, it may be concluded there is chicory with it.

Lemon in Your Coffee.

A slice of lemon in iced coffee adds as much to its tastiness as it does to that of iced tea, where it is more commonly used.

A Fruit Press.

Several inexpensive presses consisting of a perforated drum operated by a crank are on the market. These can also be used for extracting meat juice and making jelly. Fruit such as grapes is first put into the press, then strained in flannel bags.

A Shaker.

Buy a "shaker," with strainer and lemon squeezer in the top. Also an ice-shaver, and combined corkscrew-cap-opener. Squeeze the lemons or oranges directly into the strainer, reverse and the liquid will be strained. This mixer is good also for all milk and punch drinks. The cap-opener and corkscrew with lever, most quickly opens grape juice and other bottles. The shaver grates the ice off the lump instead of cracking. There is a container to "carbonate" home drinks.

Tea.

Some teas, especially the heavy-bodied India varieties are not good for iced tea, but they are delicious served hot with cream.

Do not expect one and the same tea to be equally palatable and attractive served hot or cold, with cream or with lemon.

Home-Made Orange Pekoe Tea.

Loaf sugar rubbed over the surface of an orange will retain the orange flavor by absorbing the oil. These are delicious in tea, suggesting the well-known flavor of orange pekoe.

A Refreshing Drink.

Add a pinch of salt to a half glass of sour cream and half glass of rich milk, and beat with an egg-beater until light and smooth. Pour into a tall glass, and over the top put a thin coating of pulverized nut meats and a scant grating of nutmeg. Serve cold with crackers.

Nourishing Drink.

Beat together the yolk of one egg and one tablespoon of sugar, three tablespoons new milk, one teaspoon lemon juice add the beaten white.

BREAD.

Here are some standard instructions for almost every variety of bread: (1) Best proportions are three and one-half rounded cups of flour to one cup of water, one tablespoonful of sugar, one tablespoonful of butter and one teaspoonful of salt. (2) Warm flour before using and keep all ingredients warm while mixing. (3) The kneading motion should be strong and even. (4) Bread should be put in to bake **only** when completely risen. (5) The best temperature for breadbaking is 180 degrees for ten minutes, 180 to 235 degrees for fifteen minutes and 218 degrees for twenty minutes. If you have a breadmixer it will help.

A Hint About Fresh Bread.

Before cutting newly baked bread dip the knife in boiling water. When the bottom or sides of cake or bread are burned, don't try to remove the dark signs with a knife. Take a coarse grater and grate the burned surfaces with it. You will find it easy to remove burned parts without breaking or spoiling the shape of the cake.

Don't make bread into large loaves. The center is apt to be underdone.

Stale Bread.

Grind old pieces of toast and dry bread into crumbs and put away in an airtight jar. Economy and utility both.

Put a loaf of stale bread into a closely-covered tin vessel; expose it for half an hour or longer to a heat not greater than that of boiling water; allow it to cool, when its freshness will be restored.

PASTRY.

If baking powder is old and lumpy, heat it in the oven.

Cake.

To Make Cakes Lighter.

A wire egg whip will beat a cake in less time and also make it of finer grain.

To Prevent Cakes Burning.

Sprinkle the bottom of the oven with fine, dry salt to prevent cakes, pies, and other pastry from burning on the bottom.

Loosening Cake.

If a dampened cloth is put under a cake-tin as soon as the cake is removed from the oven, the steam will loosen cake from tin.

Practical Hints.

I find that by pouring one-half cup of sweet milk over shredded cocoanut it freshens it almost like the newly-grated cocoanut. Cake or candy thus made is more delicious. Press out surplus milk when making candy or iceing. A novel center-

piece for child's birthday party is made by pouring melted paraffine in shallow glass dish, inserting the candles, which are solidly held when paraffine hardens. Then surround it with flowers and ferns which, with lighted candles, produce a charming effect.

Substitutes for Nuts.

The kernels of peach, apricot stones and of dried pumpkin seeds have a delicious flavor all their own, and may be used as substitutes for nut meats in candy or cake.

When making boiled frosting, pinch of cream of tartar added to the stiff white will prevent sugaring.

VEGETABLES.

General Vegetable Hints.

Vegetables contain mineral salts good for the blood and bones. These minerals lie close to the outside, so vegetables should be pared thinly.

Some vegetables, as peas, beans and lentils, contain a muscle-building principle called legumen. Many vegetables contain starch, and many sugar.

Cellulose is the woody part, not digestible, but serving as bulk for other foods.

Green or above ground vegetables—Peas, cabbage, etc.

Underground vegetables—Potatoes, carrots, etc.

Choose vegetables at their best, preferably the small ones.

Always select fresh vegetables.

Keep underground vegetables in a cool, dark, dry place.

Keep green vegetables in the refrigerator or other cool place till used.

Wash all fresh vegetables. Scrub all underground vegetables, and celery, with a small brush.

Soak in cold water vegetables which may be slightly wilted.

Soak dried vegetables before cooking, to restore the missing water.

Empty canned vegetables as soon as opened. Let stand a while to regain oxygen lost by canning.

COOKING.

Put all vegetables on to cook in boiling water, using as little water as possible.

Cook vegetables whole when possible, and until thoroughly tender, but no longer.

As a rule cook green vegetables in salted water, in an uncovered saucepan. Spinach should be closely covered. Peas and beans salted when nearly done.

Cook underground vegetables in unsalted water, covered. Onions are an exception.

Use 2 tsp. salt to 1 qt. water.

Use the water in which vegetables have been cooked, for soups or sauces but never use it from strong flavored vegetables.

Salt should be added just before vegetables are done as it hardens the fiber when added sooner.

When Food Is Too Salt.

Stretch a clean cloth tightly over the kettle containing the food. Sprinkle a tablespoonful or more of flour on the cloth and allow the contents of the kettle to steam. In a short time the flour will have absorbed all the surplus salt.

For Scorched Food.

When vegetables or other foods become scorched, remove the kettle at once from the stove and put it into a pan of cold water.

Well covered in a cool dry cellar, beans will keep several days, peas a week and cabbage two weeks.

How to cook ahead of time.

Put your vegetables into boiling water boil steadily until done, then drain and chill. Then put them away, and warm and season or dress them, later.

A Test for Mushrooms.

Stir while cooking with a silver spoon. If there is any foreign substance in them the silver will turn.

When vegetables are wilted, add the juice of a lemon to a pan of cold water, and let them stand in it for an hour.

To Get All the Good from Potatoes.

Before baking potatoes, rub dry, and grease. This causes the outer skin to peel off very thin, thus saving the most nourishing part of the potato. When cooked they will be beautifully brown and crisp, with a nice glazed appearance

Good Potato-Peeling Idea.

A splendid way to peel new potatoes is to tie a piece of gunnysack on each hand and then rub the potatoes. This takes off all the skin and thus saves the hands.

Potatoes, Improved Way.

The addition of a little milk to the water in which potatoes are boiled will prevent them from turning dark and will improve the flavor.

Open and empty a can of tomatoes several hours before you intend to use the contents. The tomatoes will have a much better flavor.

To Make Tomato Skins Come Off.

Pour boiling water over tomatoes and the skins will come off very easily.

A New Tomato Recipe.

When broiling or frying tomatoes sprinkle generously with grated cheese just before serving and each portion with a little whipped cream.

To Prevent Tomatoes Curdling.

A pinch of bicarbonate of soda mixed with tomatoes to be cooked with milk or cream will prevent curdling.

Good Suggestion.

Rub the dull edge of a silver knife over the entire surface of the skin of tomatoes or peaches and then peel. This loosens the skin so that they peel easily, and the flavor of the fruit is not lost, as when scalding in hot water.

If onions are peeled from the root end the eyes will scarcely be affected at all.

To Make Green Corn Taste Better.

When boiling corn on the cob add a half cupful of milk and a teaspoonful of sugar to the water.

A Celery Hint.

Serve the nicest stalks plain or in salads, then use coarser pieces in soup, cutting it fine. The leaves, place in the oven until crisp, then crush into a powder and put in a Mason jar for seasoning after celery season is over.

To Keep Celery Crisp.

It can be kept perfectly so for many days by cutting off part of the top and then putting the bunch in a pitcher of water top down.

Toasted Corn.

An improvement over boiled corn is toasted corn, which has a much more delicious flavor. After boiling the ears six minutes, so as to cook them partially, remove to a bread-toaster and place over hot coals, turning until they are browned evenly.

If corn turns yellow, add a little vinegar to the water while it is cooking. It will bleach immediately.

Boil all delicately-flavored vegetables in as little water as possible.

The Danger in Raw Vegetables.

Lettuce and other vegetables eaten raw are common source of infection. They should never be used without thorough washing and disinfecting by immersion for five minutes in a solution of one part of peroxide of hydrogen to ten parts of water, if the leaves are held up to the light, the elusive parasites can be detected.

Onions, carrots, and the like are more tender and cook quicker if cut crosswise and not lengthwise.

To Keep Beets from Bleeding.

Put in cold water as soon as cooked. Draw the hand gently down the beet and the skin will drop off.

Avoid Cooking Odors.

Cabbage, onions, cauliflower, turnips, parsnips, oyster plant and Brussels sprouts should be dropped into bubbling boiling salted water, to which a level teaspoon of sugar has been added.

Cover closely until the vegetables come to a boil; uncover and set back upon the range where it will simmer, but never boil.

The boiling breaks the cells too quickly and the volatile oils and vegetable salts are carried off in the steam.

To Counteract Acid in Rhubarb.

Put it in water to which has been added a pinch of baking soda. Bring very gently to a boil. Throw away this water. Then add sugar and a little water, if necessary, and cook as usual.

Sugar with Turnips.

When cooking turnips add a teaspoonful of white sugar to the water.

To Cool Sauce Quickly.

A spoon carries off heat slowly and should not be left in a saucepan the contents of which you want to cool quickly.

Cheese That Suits Everybody.

Pass grated American or Parmesan cheese to be used on rice or macaroni or other dishes cooked with tomatoes. By serving the cheese separately all are suited.

Salting Cucumbers and Eggplant.

Don't salt cucumbers or eggplant before cooking, it makes them indigestible and unpalatable.

VEGETABLES TO BE COOKED WITH MEATS.

Boiled Meats have served with them carrots, turnips, parsnip or greens.

Corned Beef. Boiled cabbage, beets, turnips, carrots.

Roast Beef. Macaroni, squash, tomatoes, string beans spinach, onions.

Pot Roast. Parsnips, slaw, canned vegetables, sweet potatoes.

Steak. Sweet potatoes, vegetable oysters, tomatoes, corn.

Birds. Beans, macaroni, turnips.

Chicken. Beans or peas, sweet potatoes, turnips, cauliflower, parsnips, macaroni.

Turkey. Cranberry sauce or any acid jelly with cold slaw, succotash, onions, sweet potatoes, tomatoes, or almost any vegetable.

Goose. Apple sauce, onions, squash, turnips, beans, macaroni.

Duck. Apple sauce, onions, corn, beans, squash, macaroni.

Mutton Boiled. Turnips, boiled rice, onions, spinach, string beans.

Mutton Roast. Rice or hominy, asparagus, salsify, tomatoes, squash, corn.

Lamb Roast. Asparagus, peas or beans, spinach or lettuce, white turnips, summer squash.

Mutton Or Lamb Chops Or Cutlets. The same as beefsteak.

Veal. Asparagus, parsnips, spinach, or creamed cabbage, young carrots, tomatoes.

Calf's Head. Greens, celery, beans, macaroni.

Sweetbreads. Asparagus, cauliflower, spaghetti, peas, tomatoes.

Pork. Apple sauce and almost any vegetable.

Fish (Baked, Boiled Or Fried) Green peas, cucumbers, tomatoes.

Venison. Any acid jelly, onions, squash, turnips, tomatoes.

Game. Some acid jelly, spinach, tomatoes, celery, either plain or stewed, sweet potatoes, potato croquettes.

To Make Vegetables Tender. Add a little bicarbonate of soda to the pot.

COMPARATIVE TIME OF BOILING VEGETABLES.

Potatoes $\frac{1}{2}$ to 1 hour.

Potatoes, Sweet $\frac{3}{4}$ to 1 hour.

Tomatoes 30 minutes.

Asparagus 20 minutes.

Lima Beans nearly an hour.

String Beans 1 hour or more.

Beets 1 hour or more.

Carrots 1 hour or more.

Cauliflower 20 minutes.

Celery 30 minutes.

Corn 10 to 20 minutes.

Cabbage 20 to 30 minutes.

Greens 15 to 30 minutes.

Onions, Young 30 minutes.

Onions, Old 2 hours.

Parsnips 1 hour or more.

Parsnips sliced 20 to 40 minutes.

Peas 20 to 40 minutes.

Spinach 20 minutes.

Squash, Summer $\frac{1}{2}$ hour.

Squash, Winter 40 minutes.

CEREALS.

To Whiten Rice.

A teaspoonful of lemon juice added to boiling rice will whiten the grains, give them a more pleasant flavor, and keep them separate.

Meal.

Run the meal through a flour sifter before using. Use up all meal and open cereals before hot weather, as it is not wise to keep a quantity of floury foods over the summer season. Keep in as cool and well ventilated a place as possible.

Keep Cereals.

In glass jars, except spices which come in tin containers

with sifter tops. The glass jars keep the food dry and protected against insects. From a shelf of glass jars, you can tell at a glance whether you have sufficient foods on hand, and you do not have to open boxes or cans.

PASTRY.

Pie Tips.

When making apple pie squeeze a few drops of lemon juice over the apples before putting on the upper crust.

Sprinkle a little cornmeal on the pie plate and you will have the bottom crust as light as the top, as the cornmeal absorbs the moisture.

When making pie crust in hot weather fill a bottle with ice water or cracked ice and use as a rolling pin. Set on ice when it stands.

A small amount of beaten egg over the bottom crust of a pie will prevent the crust from soaking the juice into it.

For juicy pies. Make a funnel of white paper. Put it thru the middle of the upper crust let rest on the lower crust and remove when the pie is done. It will save the juices.

Making Better Gingerbread.

By using coffee instead of water when making gingerbread you will greatly improve its taste.

Crispness In Waffles.

If you like crisp waffles, try making them with cold water instead of milk, as it also lessens the expense.

No More Greasy Doughnuts.

Fry in deep fat, and on stove with fat have kettle of water boiling. As soon as the doughnuts are done take from fat, and dip into and out of the boiling water as quickly as possible. Place doughnuts into colander, and thoroughly drain and dry. Your doughnuts will have the old-time flavor minus the old-time greasiness. Let your water cool, and skim off enough fat to go quite a way toward frying your next batch.

EGGS.

To Test Eggs.

To test freshness of eggs place in a solution of two ounces of salt to a pint of water. New laid eggs will remain at the bottom; less fresh eggs will float a little way from it, and bad eggs will lie on the top of the water. The higher the water, the staler the egg.

If an egg looks clear, when held up to the light, it is probably good. In water, the good ones lie on their sides. Every housewife should know how to test eggs. Heat is an enemy. Exposing a fresh-laid egg to more than 68 degrees Fahr. starts decay.

Eggs should be kept in an ice-box in summer, and in a cool place in winter.

A perfect shell is one of the essentials of a good egg. A "leaker" is an egg so badly cracked that its contents escape "checks" are eggs whose shells are cracked, but with membrane still intact.

Both rot quickly.

**Why washing dirty eggs usually does them
more harm than good.**

Washing dirty eggs harms, because water put on an egg washes off some of its protective covering.

A washed egg is shiny and smooth and lacks the powdery bloom of an unwashed one.

Egg terms worth remembering.

Eggs that are slightly beaten are not separated, and are beaten until a spoonful can be taken up.

Egg yolks are well beaten when they become thick and lemon colored. Egg whites are beaten dry, when stiff enough to remain in the dish when it is turned upside down. They will be dead white in color.

For beating eggs, the most common utensils are the Dover egg-beater fork or wire whisk. The whisk or fork is preferable as the whites become much lighter by their use.

Temperature for cooking eggs.

In boiling, poaching, and baking, the temperature of the water should not be above 185 degrees, or simmering point, as high heat makes eggs tough.

Making one egg go as far as two.

When scrambling, add one tablespoonful of fine bread crumb and one tablespoonful of milk to every egg.

Egg Substitutes.

Chopped suet is useful in place of eggs in milk puddings. Sprinkle a little on top, and the pudding will be rich and creamy.

In making muffins, substitute a tablespoon of milk, and a level teaspoon baking powder for each egg.

Use dissolved gelatine instead of egg in croquettes.

To Remove Egg Shells.

If, when breaking eggs into a bowl, a piece of shell gets into the egg touch it with the half shell and it can be easily removed.

When Beating Eggs.

Adding a little salt to whites of eggs when beating makes them firmer and fluffier in one-third the time. The colder they are, the quicker they will froth.

To Boil Cracked Eggs.

A cracked egg can be boiled by enclosing it in a piece of soft paper.

To Prevent Eggs Bursting.

Prick one end with a needle before placing in the water. This makes an outlet for the air, and prevents cracking.

To Make Omelets Light

Add one scant teaspoonful of baking powder for every four eggs.

An aluminum egg slicer convenient for use in decorating consists of a wire crib which falls down over the egg and cuts it cross-wise into eight thin, even sections. It costs about 35 cents at house furnishing stores.

Dark colored eggs have greater food value than white ones. A boiled egg will spin readily. An uncooked one can not.

To Clear Coffee.

Instead of putting eggs in the coffee each time you make it mix the eggs in a new can of coffee preserve the eggs.

Beating Eggs.

To beat eggs more quickly add a pinch of salt. To increase the amount of froth add a teaspoonful of water.

Egg for garnishing.

When the yolk of an egg is desired for garnishing, separate the white and yolk without breaking the latter and poach it hard in salted water. The white can be saved for many other uses.

A Good Egg Hint.

In separating eggs break them one at a time into a small funnel over a glass or cup. The whites will pass through into the glass, and the yolks will be left in the funnel.

Preserving Eggs.

While eggs are cheap in the early fall, get fresh country ones if you can. Have a kettle of boiling water. With a perforated spoon or ladle dip the eggs in and out of the water one at a time. Then pack in jars or cans and set on cellar shelf. They will keep for months.

Purchase "water glass" in its syrup form at a good drug store. Two quarts will do a great quantity of eggs. This looks like a thick, clear molasses. Procure large, deep crocks with lids. Scald. Then boil water, sufficient to make the solution. Use one part "water glass" to ten parts of boiled water, cooled. Use only clean eggs, unfertile, if possible. Either pack the jar full at once with solution to cover, or drop a few in at a time, as you secure them fresh. Jars must be kept in cool place, undisturbed.

To keep eggs grease thoroughly and then pack in shallow boxes on cotton batting, putting a layer of cotton on top. Cotton may be used many times unless an egg is allowed to spoil in it.

MISCELLANEOUS FOOD HINTS.**To Make Corks Good As New.**

Put the corks in boiling water and leave them until the water cools. They will then be as good as new and fit just as tightly.

To Prevent Vinegar Mother.

Add a few drops of sulphuric acid to each gallon of vinegar.

Clogging of Salt Cellar with Dampness.

A little cornstarch mixed with salt will keep it from clogging with dampness. A few grains of rice can be mixed with salt in shakers for the same purpose.

To Prevent Burning of Food.

Use asbestos mats to prevent burning of vegetables, fruits and cereals.

When Mayonaise Curdles.

It is because the oil was added too rapidly or the ingredients were not sufficiently chilled.

Sugar in Olive Oil.

To prevent olive oil becoming rancid, add two lumps of sugar to each quart as soon as opened.

When Stoning Raisins.

Rub a little butter or grease over your fingers before beginning and you will be able to stone raisins with little trouble. A little butter should also be rubbed on the blade of the knife.

Newspapers.

Never use newspapers to wrap about anything eatable; have a supply of paraffine paper always on hand.

To Make Vinegar.

Put fermented canned fruit in a crock behind the stove, add equal amounts of water, left over tea, fruit jar rinsings, peelings and cores of apples and molasses jug rinsings. Strain and keep covered. This makes excellent vinegar. Do not put vinegar or sour acids in metal dishes.

A Salt Shaker Suggestion.

Your salt will not cake if you put a slim, long pebble into the shaker but will keep soft and loose.

To Remove Fat from Soup.

Let cool and then remove; or put a piece of thick brown paper or a blotter over it. Remove and repeat; the hot grease adheres to the paper.

When Soup is too Salty.

Add a teaspoonful sugar and four teaspoons vinegar. Or a sliced vegetable will absorb some and can be taken out.

Ripening Ice Cream.

Allow the cream to stand five or six hours before using. The dasher should be removed, the cream packed down and the tub

filled with fresh ice and salt. This "ripening" hardens the cream and gives it a better flavor.

Relishes.

Olives and radishes should be covered with cracked ice, but not packed in it. Celery is preferably placed in glasses.

To Improve Mustard.

Add a drop of salted oil to mustard when it is being made; it will improve the taste and keep it fresh for days.

A Delicious Flavor.

A teaspoonful of peanut butter in homemade candy gives a delicious flavor. A little in salad dressing gives the nutty flavor.

Improving Fudge.

A few drops of molasses added to fudge after it has boiled for about five minutes will improve the flavor and keep it from getting sugary if boiled a little too long. Substituting sweet cream for milk also adds to the richness of fudge.

Cream of Tartar.

If a pinch of cream of tartar is added to any sugar and water candy in the cooking, there is less likelihood of granulation.

To try Custard.

Stick the blade of a silver knife into it. If it comes out clean the custard is done. This is infallible.

Mixing Mustard.

Mix mustard with a little boiled milk instead of water. It will be much creamier and smoother and will keep moist longer.

To Improve Ripe Olives.

Soak them over night in olive oil to which has been added a small piece of a clove of garlic.

Care of Furniture

CARPETS.

Sweeping A Carpet.

To sweep a carpet without dust and brightening the colors, add a half cupful of gasoline to a pail of water and dampen the broom with it.

Sweep Axminster and Turkish carpets with pile so that the dust will be brushed out not in. You may sprinkle on the carpet wet salt, wet bits of newspaper or wet sawdust sprinkled with ammonia before sweeping them. It helps preserve the color and keep away moths.

Stair Carpet.

When Buying Stair Carpet buy it a ward too long. It can be double at lower end so when edges are worn it can be moved up and the carpet will last twice as long.

To Brighten Carpets.

Wipe them with warm water having a few drops of ammonia and one teaspoonful of kerosene to 2 quarts of water. To restore the colors in a faded rug or carpet, apply, after a thorough sweeping, a weak solution of alum.

Dissolve in 2 gallons of water, 8 ozs. of ammonia, 1 oz. of ether $\frac{1}{2}$ oz. of chloroform, 1 teaspoonful salt, 1 teaspoonful baking soda, $\frac{1}{2}$ teaspoonful alum and $\frac{1}{2}$ bar soap. Use 3 table-spoonful of the mixture to each pail of water. Mix thoroughly and use foam only.

A good recipe is to boil two bars of white soap chipped fine in 2 gallons of water for fifteen minutes. Add 4 ozs. of borax and 8 ozs. of washing soda and stir well. Then add 4 gallons of cold water and $\frac{1}{2}$ pint of wood alcohol. Make this paste the day before. After sweeping carpet thoroughly, scrub with the paste and warm water, rinse with clean water and wipe with a clean soft cloth.

Shave fine 1 bar of laundry soap and pour over it an equal mixture of ammonia and turpentine; about 2 tablespoonfuls and work it into the cake. Dampen a sponge, rub on the soap and clean small place at time. Rinse sponge in clear water and rub the spots again. This will not make the colors run.

Spots And Stains In Carpet.

Tomato juice or canned tomatoes will take ink out of carpets. Or ink stains can be removed from carpet by pouring boiling milk on the spot and wash immediately with hot water. Or put salt on the spot and cover well. Remove when discolored and repeat till salt remains white.

To remove oil or grease from carpets spread a layer of French chalk over the spots, cover with a sheet of blotting paper, and iron with warm flat-iron. Repeat the process if necessary. Or sprinkle the grease spot thickly with cornstarch and cover with

a newspaper. Leave for a day, then sweep off. Or cover with fuller's earth and moisten with turpentine. Cover with paper, let stand for two days, then brush off.

Care Of Carpet Sweeper.

Remove brush and take off hairs and lint, rub well with a cloth wet in kerosene, and put in the air till odor has evaporated. Use a small wire hair brush to get hair and strings off the brush.

To keep the wood pulleys on carpet sweeper brushes from slipping when worn smooth, wrap once or twice with adhesive tape. This will keep the pulleys from wearing unevenly with the grain of the wood.

Take a piece of cloth one inch wide and 12 inches long, saturate with kerosene; place one in each dust-box of carpet-sweeper, and there will be no dust.

Miscellaneous About Carpets.

Line a stair carpet with new cotton. Even a paper lining makes it wear longer. Put strips of old worn comforts under the stair carpet for a good lining.

An old piece of brussels carpet can be tacked down and painted any color.

A home-make rug beater can be made from a length of garden hose, which is flexible and easily handled.

To prevent rugs from curling sew a coat weight in each corner and on the ends underneath and this will hold it down. The stores are now selling a patent rug fastener. It is a small wire, steel toothed, and the teeth grip the edges so that it can be clamped on the floor.

Take a damp cloth to sweep down the stairway. It not only picks up the dust and dirt, but also wipes off any dirty places that may be on the wood, rinse out cloth often.

To Prolong A Mat's Life.

Doormats can be prevented from fraying and made to last much longer by buttonhole stitching around the edges with a large packing needle and some medium sized string. Make the stitches about one inch apart and one inch deep.

To Wash Oil-Cloths.

Use equal parts of skim-milk and water.

RUGS.

To Clean Oriental Rugs.

Oriental rugs will grow soiled and unsightly unless properly cleaned. The process which professional cleaners use, is plain scrubbing with soap, water and a brush, and thoroughly drying in the open air after rinsing. In the case of small rugs, they may be scrubbed at home in a tub, and rinsed with a hose.

Repairing Oriental Rugs at Home.

Reinforce the tender places by putting underneath them a piece of burlap, match the colors in the rugs as nearly as pos-

sible with worsted. The worsted will usually be too bright, so dip them in strong coffee and dry thoroughly before using. Take the worsted double and sew loosely through and through both rug and burlap, following the pattern of the adjacent figures. Leave the stitches on the upper side longer than the surrounding nap and shave evenly down to it.

Disinfecting Navajo Rugs.

Navajo rugs and Indian baskets should be thoroughly disinfected before using, as many of them have seen years of service in places where sanitary conditions are not good. Baskets and rugs can be washed, and will be improved by the process.

How Linoleum Kills Germs.

Use linoleum on the floors of your rooms because of its convenience and cleanliness. Linoleum has great value as a germicide. Few microbes can live long on it. It is poison to them. Germs live longer on stone floors than on linoleum, except at low temperatures, when the greater cold of the stone kills microbes which only exist in warm temperatures. Linoleum, not as cold as stone, is colder than other floor coverings, and has a double effect on germs.

The prejudice against linoleum for nurseries is ill-founded. It is easy to wash, but, with the habit babies possess of picking things from the floor and putting them into the mouth, linoleum is a safe guard. A bare wooded floor provides a breeding place for germs.

To prevent linoleum wrinkling, cut linoleum $\frac{1}{2}$ inch smaller than the size of the room. This will leave a space on the four sides to allow stretching. The gap is covered with three quarter-inch quarter round molding nailed to the floor around edge of the room, overlapping the linoleum. The molding prevents the dirt from working in between the floor and wall.

To brighten linoleums and floors; when perfectly dry, take soft woolen rag or an old stocking, dip in clear varnish and rub on floor coverings until the colors show up; then take a second rag and rub up. It dries quickly.

TO CLEAN MATTINGS.

Wash with salt and water, drying quickly with clean water, or dissolve 10 cents worth of oxalic acid in 2 quarts of water and apply with scrubbing brush. Wash with clean water afterward.

For grease spots on matting, make a thin paste of fuller's earth and water, put it on the spot thickly and when it is dry, lay a paper over it, and let it remain several days. Brush it off and the stain should be gone. Sweep first with the grain, hard then with a soft broom shaken out of warm water across the grain. Then take a pail of warm water in which there is a

handful of salt, wash the matting with it quickly and rinse with clean water. It will be wonderfully freshened.

To Clean Brass.

A little denatured alcohol applied with a brush will quickly remove the dark brown tobacco stains from copper or brass ash trays.

Never wash brass beds. To clean them, rub with a piece of chamois cloth, slightly dampened. A little prepared chalk will remove any obstinate spots.

To keep brass beds and other kinds of brass work from tarnishing, and also to avoid frequent polishing, the brass should be lacquered with gum shellac dissolved in alcohol. The lacquer should be applied with a small paint brush. Ten cents worth of it will lacquer a bedstead.

Rub with vinegar and salt, or oxalic acid and salt. Wash at once and polish with tripoli and sweet oil, or it will tarnish quickly. Oxalic acid and salt is best for furniture brasses as it does not stain wood.

Take 1 ounce of alum dissolved in 1 pint of boiling water and rub on the brass with a flannel cloth. This will clean quickly without harm to hands or metal.

TO CLEAN FRAMES AND OIL PAINTINGS.

Put an onion thru a grinder and use the juice to clean with. Use with softbrush on both the picture and frame. This will prevent flies from lighting on them and remove all traces of their presence.

A few drops of ammonia in a cup of warm water, applied carefully, will clean paintings and chromos.

For Gilt frames use 1 oz. borax, 1 pint boiling water. Let cool Dampen a cloth with it and wet the spots. Repeat several times and rub gently with a cloth just dampened in the solution.

WINDOW SHADES.

To renovate window shades, place the old cracked shade on a smooth, flat surface and paint one side with common oil, paint about the same shade. Let dry thoroughly and paint on the other side. Will be like new and last indefinitely.

To make window shades roll better, pull the shade out as far as it will go. Get up on the window sill and take the shade off its hooks. Roll the shade up in your hands and replace it in this manner on hooks. If too strong, take it off the hooks and unroll it partly then replace.

To stop shades rolling up too violently, and wind itself over the roller, put a screw eye in the wood stick at the bottom, and then, if you release the curtain suddenly it will not wind over the roller.

When window shades grow ragged and frayed at the bottom, they can be taken down and turned up side down. Take the

tacks carefully out of the upper end and make a hem sewing it on the sewing machine with large stitches.

Do not bruise your fingers in winding up the spring of a window shade. Insert the metal piece between 2 tines of a three tined steel kitchen fork, and wind up using the fork as a handle.

Old window shades, when soaked and boiled clean to take out the dressing, make excellent roller and kitchen towels.

THE PIANO.

General Care of Piano.

Camphor gum inside the case prevents moths. The temperature of the room should be moderate: dampness is bad, also a drying heat. Piano should be open part of each day.

Effect of Change of Season.

A piano tuned in Summer will not be tuned to the same key, nor in the exact tune, in the Winter. Cold makes each string contract and increases the tension. The frequency of vibration of a string depends on the tension; the greater the tension the greater the frequency. Pitch depends upon the frequency, piano strings will have a higher pitch in Winter than in Summer. This is compensated to some extent by contraction of the frame but not completely.

BED LINEN.

To Clean Comforts.

Dainty colored comforts need not be cleaned often if edges are bound with a deep band of swiss. Edge with lace or colored stitch to match border, baste on so that it can be removed for washing.

Baking Cotton Batting.

To make a stuffing for sofa pillows that is as fluffy as down or feathers, cut cotton batting into little squares and heat in a baking pan in the oven, taking care that it does not scorch. In half an hour these squares will have swelled to twice their size.

Paper Pillow.

Any inkless soft paper cut or torn in pieces about 1 inch square and put in unbleached muslin sack 18 by 27 is far more healthful than feathers for head and hair.

Coffee Grounds For Pin Cushions.

Dried coffee grounds make an excellent filling for pin-cushions. They do not rust the needles and do not become too hard and compact.

Pillow Tubing.

Pillow tubing is specially woven material without seam and only one hem at the bottom. Goods for bolsters can be secured at any white goods store.

Correct Size for Sheets and Pillow Cases.

Measure mattress allow excess of 30 inches for both length and width. This allows a tuck-in which protects mattress. Standard pillows are 21 by 28 inches. Case not more than 23 by 36.

To Keep Comforts Clean.

Make a slip 9 inches on each side. Seamed at each end and tack it across the top of the comforter. Embroidered edge and an initial make it look like a fancy sheet turned over.

A Novel Comfort.

Taking a pair of the largest size cotton blankets, spread three pounds of cotton batting on one-half, turn the other half over the cotton and knot with cord or bright yarn. Sew up the sides, and you have a light, warm comfort. When soiled, cut the knots and take out the cotton, wash the blankets, put back the cotton, tie, and you have a new comfort again.

DUSTING.**Generally.**

Use a soft oiled rag. A dust brush simply scatters dust and germs. For spots that the dust rag fails to reach, a paint brush is much more satisfactory for cleaning cracks and corners. No crevice is too small or deep for it to reach. An old stocking oiled and dried makes a good duster. Slip over hand and use between sweeping days.

Dusters and Dust Cloths.

Buy a large size dish mop. Mix paraffine oil and coal oil, two-thirds paraffine, one-third coal oil. Saturate mop, thoroughly drain oil out and you have a dustless duster for the small cost of twenty cents that will be a joy. Take one and put in a broom handle to make a mop for hardwood floors.

A Dust-Absorbing Cloth.

For floors bordering rugs, either painted or varnished, use a soft cloth saturated and dried in ten cents worth of paraffine oil with a small quantity of turpentine. Cloth can be used repeatedly by shaking the dust from it. This cloth is good for dusting furniture.

CURTAINS AND DRAPERIES.**To Clean Tapestries.**

Pour boiling water over a handful of bran. Let it stand until tepid and then plunge the tapestries into it. Use no soap and do not rub, but shake the goods up and down in the liquid. Wring them out, rinse well in tepid water and hang out in the wind. When dry, shake them well to remove the particles of bran.

To Hide a Hole in a Curtain.

A piece of starched net or lace put under a hole in a lace

curtain will be hardly visible when pressed smooth with a warm iron.

Pretty Portiers.

Pretty portiers can be made from leather scraps, known as "binders' scraps." The scraps of leathers are cut in strips one-half inch wide and are tied in knots, as carpet rags are tied. The more knots the more effective the portiers. A beautiful shade of green leather can be purchased at the bookbinder's for ten cents or so per pound. Six pounds will be sufficient to make a good-sized portiere.

To Clean Brass Curtain Rings.

When brass curtain rings get dull looking and tarnished, soak them in a little paraffine oil for 24 hours and they will look bright as when new.

For Rusty Curtain Hooks.

Place them in a bowl and cover with cloudy ammonia. Leave for half an hour, and then stir them around with a stick. The hooks will look like new. Push points into a bar of soap, and they will slip in fabric quite easily.

When Hanging Curtains.

Curtains are easily run on brass rods if a thimble is first placed on the end of the rod.

To Prevent Sagging of Curtains in Washing and Stretching.

Baste a narrow strip of muslin along each outer edge before putting curtains in water, and let it remain until the curtains are washed and stretched.

For Cleaning Lace Curtains.

Two pints cornmeal, one pint flour, one-half pint powdered borax. Mix thoroughly, sprinkle over curtains (after shaking out dust), roll up and lay away several days, then put one piece at a time in large paper flour sack and press. Will look like new. Especially good for curtains that are too tender to cleanse by washing.

Old Curtain Use.

A very handsome centerpiece for the dining table may be made by using old curtains, if they have a heavy or conventional design in the borders. Cut out the medallions of figures, apply to linen of size desired for your doiley, and if the curtains have heavy edges, use that for outside edge.

Dyeing Old Drapes.

To freshen, boil out the old dye in soapsuds, dye a bright new color; if a plain material a pretty border can be stenciled on by using oil paint mixed with a little gasoline. This paint does not fade in laundering. A stencil can be made at home by drawing a design on heavy cardboard, cutting out carefully with a knife and giving it several coats of shellac to keep it from soaking up the paint.

Putting Good Curtains Away For The Summer.

Lay away the long trailing curtains during the months when wind and dust play havoc. Either leave the windows bare or use side curtains of sill length only made of ten cent scrim or some figured Japanese or other towelings. Do not have any curtains over the glass of the window itself; merely at the side.

Dry Cleaning of Curtains.

Shake curtain well in open air and whisk with stiff brush; then lay on floor on clean sheet and cover lightly with Fuller's earth or powdered magnesium. Allow to stand over night; then remove, shake and hang again in open air.

Cleaning Jute Velour Portiers.

First take them down and shake thoroughly, then try covering with magnesia mixed with just enough pure benzine to make a moist mass. Spread evenly over the fabric; allow to stay, until dry, and then brush clean.

To Clean Couch Covers.

Put the couch cover into a sheet and sop it up and down in naphtha or gasoline. Do not rub or wring. Take from the cleansing agent, press gently against the side of the tub, remove the sheet and dry cover out of doors. A wool baby afghan can be treated in the same way, using a pillowcase as a holder.

Polishing Furniture.

Wringing out a cloth in hot water and wiping the furniture, before putting on furniture cream will result in a very high polish that will not finger-mark.

Cleaning Furniture and Woodwork.

Rub with wallpaper cleaner, then polish with a soft cloth; leaves a fine polish. Keep dust out of carved furniture with clean paint brush.

To Rub Polished Tables, mix five parts of olive oil with one part alcohol. The alcohol cuts the grease and removes trifling stains.

To Polish Woodwork and Furniture.

The wood trim of a room, as well as furniture will take on a soft polished look if rubbed occasionally with a mixture of two parts of linseed oil and one of turpentine. Apply with a woolen cloth. The oil "feeds" the wood and helps to preserve it, or use as above a mixture of two thirds crude oil and one third Benzine, well shaken. Rub till dry.

Making Old Furniture Like New.

Fill a pail with lukewarm water and pure soapsuds and go over every bit of the woodwork with a piece of cheesecloth. Then wring out a second piece of cheesecloth in hot water, pour a tablespoonful of good furniture polish on it and wipe the furniture carefully.

Next to scraping and refinishing there is nothing so good as oil for varnish surfaces that have faded and cracked through

exposure to sun or other heat. Rub once a week with boiled linseed oil, rubbing the oil in well with a woolen cloth. After a few weeks the surface will become smooth, soft and of a good color. Water and soap never should be used on polished furniture.

Soiled or Discolored Enamel Furniture.

Melt one tablespoon of bicarbonate of soda in one quart of boiling water; when cool wash the furniture with the solution, using an old flannel cloth for the purpose, or use finely powdered whiting made into paste by adding water. Cold tea can be used on dark woods.

To Clean Mahogany.

Ten parts pale resin, 80 parts benzine, 5 parts palm oil, $\frac{1}{2}$ part essence of verbena and $1\frac{1}{2}$ parts essence of peppermint. Seal well in dark bottle and keep away from fire and light. Shake well before using. Apply with a silk rag and polish with dry silk.

To Clean Fumed Oak.

Mix one part benzine with two parts crude oil. Shake well before using and apply a small quantity with a duster.

To Clean Black Walnut.

Unvarnished black walnut can be successfully cleaned by rubbing it thoroughly with a piece of soft flannel soaked in either sweet or sour milk.

To Clean White Enameled Furniture.

Remove all dirty marks with a flannel dipped in wood alcohol. Then wash at once with tepid water to which has been added a little fine oatmeal. Never use soap or soda.

Use clear turpentine and a soft cloth to clean white enameled woodwork or furniture. It will remove every spot without removing one bit of the gloss, as soap often does.

To Clean Ivory Furniture.

Spots on ivory can be rubbed out with a little tripoli (powdered at the drug store) mixed in sweet oil and applied with a clean flannel cloth. If the stain is made from medicine it may not come off.

Stain to Imitate Mahogany.

Soak logwood chips in vinegar or acetic acid for twenty-four hours or more and heat the solution before applying.

To Clean Upholstered Furniture.

Cover upholstered with a towel and whip with a rattan, shaking towel when dirty. Remove towel and brush hard. Then wipe with a cloth dipped in hot water and wrung dry, and finish by wiping with cloth dipped in alcohol.

Furniture Pests.

To kill.

The worm-like larve of moths that infest upholstered fur-

niture, take it out of doors on a shiny day and spray with gasoline or naphtha using an atomizer or whiskbroom. If wood worms are in old furniture rub with turpentine and then polish with turpentine and beeswax.

When Furniture Drawers Stick.

Drawers often twist and bind when pulled out. Either the surface is uneven and needs planing or sandpapering or it does not fit. If it does not fit lower the cleat underneath by gently hammering or raise the same way.

Very often a drawer will run smoothly after rubbing sides top and bottom with a little soap or melted parafine.

To keep Bureau Drawers Clean.

Paint them on the inside with white enamel paint and wash them off once in a while.

Scratches on Furniture.

Make a polish of equal parts of cider vinegar, turpentine and linseed oil. It will keep a long time in a bottle. Apply with a soft cloth. This is also good for scratches on a varnished floor.

To Remove White Spots on Furniture.

Clear olive oil will remove all white spots, and make it look like new. Other ways are as follows: Hold a hot stove lid or iron over the spot, or apply spirits of camphor or ammonia, and dry off, or apply common baking soda dampened or rub with a cloth dampened with linseed oil and alcohol and polish with linseed oil on a cloth. In each case leave furniture dry.

For Varnish.

If the varnish on a piece of furniture becomes white from dampness or heat take a soft cloth, moisten with essence of peppermint, lightly rub the white mark and the discolored place will resume its former appearance.

Salt as a Cleanser.

To clean willow furniture, scrub well with a coarse brush and water that is strongly saturated with salt. Then dry with a soft cloth. Salt not only cleans willow ware, but prevents it from turning yellow. Straw matting may be most successfully cleaned in the same way.

To Clean Wicker or Willow Chairs.

Do not clean wicker or willow chairs with hot water or yellow soap. Dust the chairs carefully, and then scrub with tepid water which contains a little kerosene. On unvarnished reed or willow furniture a solution of oxalic acid and water can be used. It will bleach natural wicker and make it look like new.

If the seats of the chairs droop, wash them in hot water and turn them upside down to dry in the sun. They will shrink into their original shape.

Stained floorboards can be whitened by scrubbing with

chloride of lime solution using a tablespoon to a half gallon of water.

Beeswax and oil of turpentine mixed to the consistency slightly thicker than pure turpentine make a good floor wax. The floor must be perfectly clean before it is applied. Apply with a rag. Hard close-grained wood will require less wax than wood which is soft and open.

MIRRORS.

To Wash Windows and Mirrors.

Rub over with chamois skin wrung out of hot water, then wipe with a piece of dry chamois skin. This method saves much strength. Finish by rubbing with tissue paper.

Cleaning The Mirror.

Wipe with a pad dipped in whiting and warm water. Dry with soft cloth and polish with piece of chamois skin.

When Quicksilver is Scratched.

If scratches are small they can be painted over with the best silver paint and allowed to dry or the scratch may be backed with a piece of tin foil using white glue to hold it in place. Any mirror will be improved by hanging a dark gray cloth behind it.

To Clean Looking Glasses.

Take a part of a newspaper, fold it small, dip it in a basin of clean cold water, and when wet squeeze it out as a sponge. Rub it hard over the face of the glass, taking care it is not so wet as to run down in streams. Let stand a few minutes then polish with a fresh, dry newspaper. Windows can be cleaned in the same manner. Bon Ami is very good for mirrors and windows.

MISCELLANEOUS.

Portieries From Leather Scraps.

Use leather scraps, known as "binder" scraps." These are cut in strips $\frac{1}{2}$ inch wide and tied in knots, as carpet rags are tied. The more knots the prettier. Such leather scraps can be purchased from a bookbinder for a small amount per pound. Six pounds is enough to make a good-sized portiere.

Something Handy For Your Desk.

A sheet of corrugated paper is a handy thing to have on your writing desk to hold wet pens or brushes. The paper absorbs the liquid and the corrugations hold the pens in a handy position.

To Keep Inkwells Clean.

Pour the ink out of the wells once a week and wash the wells with hot water.

Prevent Mould On Books.

Perfumed olive oil sprinkled on the library shelves will prevent mould on the books.

Doorstops.

To stop swinging doors from bumping against furniture, screw a doorstop either in the base-board or in the floor, at a point that will prevent the door from swinging beyond the desired angle.

Regulating A Clock.

If you have a pendulum hall clock and it is losing time, screw the bob at the end of your pendulum up a little, and if the clock is gaining screw it down. Do this a small amount at a time each day and you will soon find the place where the clock will keep the correct time.

To polish a black marble clock rub it with olive oil and finish with a clean chamois leather.

To Save Umbrella Stand.

Keep a sponge inside a porcelain umbrella stand to absorb the water from wet umbrellas, and also to prevent the umbrellas from breaking the jar when they strike the bottom.

Sewing Machine Needs.

Oil the sewing machine frequently with a good oil, following a thorough cleaning with absorbent cotton and kerosene.

Don't stop your work when the sewing machine belt gets loose, and cut it off and fasten it, but simply slip a few large rubber bands over the small wheel. Or put a few drops of castor oil on the band, run the machine a few minutes and it will tighten.

To Prevent Tungsten Lamps Breaking.

Have lamp cord looped and a small home-made spring inserted to take up any shock. The Madza lamp gets very hot and requires that the air in contact with it on the outside be renewed frequently, a condition well attained automatically if the lamp is hung without a shade. Use a ventilated shade (which is one with an outlet for air at the apex.)

To Replace Screws.

When a screw has worked loose in any article of furniture and will not bite when screwed in again, try taking out the screw and whittle a few matches, glue them into the enlarged hole then replace the screw and it will be as firm as new.

An Inexpensive Piazza Screen.

A useful screen for the piazza can be made from a small clothes-horse with a heavy frame. Paint the frame any desired color and cover the outside with denim or heavy burlap, fastening it with brass-headed nails. On the inside of the frame magazine holders may hang from the cross-pieces of the horse; here may also hang the bag of embroidery.

To Mend Celluoid.

Moisten the broken edges with glacial acetic acid and hold them together until the acid dries.

Powdering Your Cards.

A little talcum powder sprinkled on playing cards that are old and stick together will make them slide almost like new.

To Glue Successfully.

Both articles to be glued must be absolutely clean, must have a thin covering of glue and must be held firmly together until they are harden

Stoves.

When stoves are put away for the summer rub with kerosene and wrap in paper. This will prevent rust.

To Clean Plaster Of Paris.

First brush carefully with a soft clean nail or toothbrush. Then make a paste of whiting (bought at drug store) and warm water and apply with soft cheesecloth. Leave it to dry, then brush off with clean brush.

Pad under Vases.

An asbestos mat or blotter placed under the doily on which a vase or jar containing flowers sits, will prevent any water which might run over from spoiling the woodwork underneath.

To Clean Calf Book Bindings.

Wash the bindings lightly with a soft sponge dipped in a mixture of a half ounce of the best glue dissolved in one pint of warm water, one teaspoonful of glycerine and a little flour paste. When dry, rub well with a chamois skin.

Using Old Bottles.

A bottle may be cut off by wrapping a cord saturated in coal oil around it several times, then setting fire to the cord, and just when it has finished burning plunging the bottle into cold water and tapping the end you wish to break off. Oddly shaped or prettily colored bottles make good vases. The top of a large bottle having a small neck makes a good funnel. Large round bottles make good jelly glasses.

Burlap Table Covers.

A square of red or green burlap worked with a cross-stitch pattern makes a very pretty table cover for a porch or bungalow living room. Finish the cover with a fringe made by cutting equal lengths, drawing them into the edges with a crochet hook, and knotting once or several times. Porch and hammock pillows are made of the same material at small expense.

Gas Mantles.

To remove a gas mantle. Pass a hat pin thru the loop at the top of a mantle and gently drop it into a glass tumbler with the pin resting on the sides of the glass.

Touching up Leather Furniture.

When black leather furniture shows worn places touch up

with black liquid furniture polish. To clean leather use three parts milk and one part water. It cleanses as well as polishes.

Renew brown leather chair cushions with brown shoe dressing. It will make them look and wear better.

If morrocco leather chairs are shabby in the seat, they may be renovated easily. Rub over lightly with a rag wet in linseed oil. If the leather is red, add a little rose-pink to some French polish. Apply with a pad made by folding a bit of wadding in a cover of old calico. Use the polish sparingly, too much tends to make the leather stiff. If chairs are green or blue, add a little of whatever tint is necessary.

Health and Toilet Hints

General Hygiene.

To live long, have some specific purpose. Rust is more harmful than labor; ride a hobby hard to a cheerful old age.

Make a careful toilet before retiring; clean the face and body of impurities in the pores that cause blemishes and disease. Clean teeth thoroughly; night hours are long for germs. A toothbrush should not be too large or stiff. There are brushes that can be cleaned better than those formerly used. Germs are introduced into the mouth by a hard tooth brush. Wash the face with cold water, then with tepid and mild soap; don't rub too hard. Brush hair thoroughly and massage scalp. Bathe the feet in warm water every night and you will not suffer in the day-time.

Japanese Women Beauty Secrets.

They have remarkable poise and are the best bred women in the world. Their complexions are perfect, their hair well cared for, their bodies delicately proportioned. They eat no bread and little meat and drink much weak tea without sugar or cream. Sweets are almost forbidden. They live an outdoor life with mild exercise and sleep on mats usually without pillows, and a simple life and simple diet bring a complexion without blemishes. They have the secret that American women miss, of being able to completely relax. They soak their hands for 15 or 20 minutes in warm water and warm oil and massage them until they are shapely and soft. They bathe frequently and wear loose clothes.

Advice To Brunettes.

The eyes of a brunette should shine starlike out of a creamy white face. Your menace is your liver, and your besetting fault is a lack of cheerfulness. Great care should be given the eyelashes and eyebrows. Trimming the ends of the lashes once in six weeks makes them grow longer and thicker. Brush the lashes and brows with a tiny brush made for that purpose. Train the brows into a high arch.

Advice To Blondes.

Six subjects are of special consideration to the blonde. Her type has the most delicate of complexions. Keep your hair as light as possible. Eat food that will enrich your golden coloring. Avoid fatty foods, and guard against a faded appearance. Dress to emphasize golden coloring. A shampoo, one tablespoon of borax, in a gallon of water once or twice a week lightens the hair. Two shampoos a week, one gallon water with half wine glass of ammonia, brings about the lightening of the hair. Two shampoos a week in a gallon of warm water with heaping tablespoonful of washing soda, is the speediest agent

for lightening the hair, excepting peroxide. One tablespoon of peroxide to a gallon of water, some blondes use, who do not wish to actually bleach their hair; to make their hair fluffy draw it into a loose mass after shampoo and tie with a ribbon, drying thus. The facial massage of blondes, must be very light. Orange is the best for the complexion, clears the skin, and adds a rich shade to the hair.

PERSONAL HYGIENE.

Definition.

Personal hygiene, comprising air, soil, dwelling, clothing, nutrition, and activity, is the greatest factor for bodily strength and efficiency and defence against disease. Ideal conditions require a perfect balance of work, play and sleep.

The Busy Woman.

The woman who neglects health for social activities, hurts herself and society. The brilliant season which ends in a sanitarium, is a failure. A busy, absorbing life in the home, at the office, or in society, if effective, must be founded on health. Health depends on the habit of correct eating.

Exercise.

Walking is now sadly neglected. Lack of exercise brings on a torpid liver, a sluggish brain and general ill-feeling.

Running retards, but walking is a great aid to digestion. By walking after eating, the thin will gain in weight and the stout grow thin.

Walking shakes up the liver, keeps it in good working order; it eliminates poisonous waste products, from the lungs, skin and kidneys; it stimulates nutrition, and prevents the deposit of morbid matter in the muscles.

Correct Posture.

Few realize the importance of sitting or standing correctly. Try this exercise. Stand against wall or door with feet together and arms touching the wall; shoulders and head against the wall, with body touching at the feet, hips, shoulders and crown of the head.

Next, lean head backward until the ceiling is clearly visible, keeping back of the head firmly against the wall. This forces the shoulders out from the wall. Then return head to its normal position, not changing shoulders and hips.

Now walk away from wall, retaining posture achieved, which is correct standing and walking pose. This method persisted in for a short time, will overcome improper habits of many years.

To Stimulate The Appetite.

Take a tooth brush, dip it in a strong solution of salt and water and pass it over the tongue.

To Induce Sleep.

Avoid brain activity during the evening. If feet are cold, apply a hot footbath or a hot-water bag. Cold water applied to the head further relieves brain congestion. A general hot bath will usually produce sleep better than drugs. Active exercise, for a sedentary life, late in the afternoon is advisable, together with a cold dip in the morning to help the circulation and brace the nervous system. The last meal of the day should be light and easily digested. If wakeful during the night, a cracker and a glass of milk will help. When sleeplessness is due to acidity of the stomach half a teaspoonful of bicarbonate of soda will correct it.

Man is the only animal that eats when he is not hungry, and he is apt to do this in the spring. He has the big-eating habit left over from winter. The torpid condition that results, is commonly known as spring fever. It can be avoided by restricting eating to real food, as indicated by hunger.

Fewer Clothes On Bed.

Many sleep under too heavy bedclothing. Use of bed-covering is to keep in the heat that the body provides, not to keep cold out. Silk is the best covering; a silk nightdress or pajama suit is better than flannel in cold weather. Clean sheets, one thin woolen blanket and an eiderdown quilt is an equipment for the coldest night. Using heavy bed-clothes makes many people tired in the morning.

Where Not to Live.

Never live within a block of brass, copper, cement, brick, alkali, ammonia, iron and india-rubber manufactories. They are poisonous to air.

Olive Oil As Medicine.

The machinery of the body needs oiling, like any mechanical machine, and olive oil taken internally, is beneficial. A tablespoonful aids digestion and eases liver trouble. This oil should be served frequently as a dressing, and on vegetables, and serves as an appetizer as well, and it benefits catarrh of the stomach or throat.

WATER AND ITS USES.

If we relied on water, instead of drugs, we would be surprised to see the improvement in our health. For congestions, pains and indigestion, hot fomentations or compresses afford immediate relief. In severe cases, a sitz bath or foot bath, or tub bath of hot water. This sometimes relieves an attack of gall stones.

Cold water packs are used for nervous ailments of long standing. Cold compresses are beneficial for colds and sore throats. Pack the throat, lungs or abdomen as needed. Water can be used on quite delicate subjects. Spray baths, not too

cold, have a tonic effect, and a daily warm tub or sponge bath is beneficial.

In giving packs, compresses or other water treatments without a doctor's advice, see that the patient reacts quickly, is not chilled or shocked. See that the outside of the pack is kept dry with plenty of flannel or heavy Turkish towels. Friction is good after applications, and even light exercise, if patient is strong.

Many people drink little or no water. An abundance of water not only flushes the system, which should be done frequently, but helps the action of the skin. The water should be free from germs. If in doubt, boil it.

Water is a necessity of life and forms two-thirds of the body and five-sixths of the food we eat. Science says digestion, or any other vital process is impossible without water. Physicians now advise the drinking of 2, 4 or more glasses with a meal provided the food has been thoroughly masticated and swallowed.

To test purity of water: Put it in a flat earthenware vessel, to evaporate rapidly. If the deposit is white and powdery, the water is good but hard. A greenish or yellowish tinge is suspicious, and is very dangerous. Other tests can be supplied by any chemist.

Distilled water, flat in taste, can be improved by a little lime water and bicarbonate of soda. Boiled water is improved by turning it rapidly several times from one vessel to another.

To make boiled water palatable, boil 20 minutes, place in a stone jar and cover with cheese cloth, leave in a cool place at least twelve hours, then put in bottles with patent stoppers and keep cool. Scald all utensils and cheese cloth.

Straining, or even filtering, will not remove harmful germs. Add 3 grains of hydrochloride of lime to each gallon of water and germs are destroyed in a few minutes. Solution is harmless to man.

For weariness, bathe back of neck with hot water till relieved, then bathe the face with hot water.

Put an earthen vessel of water over stove or radiator. Boil gently and provide necessary moisture to the air.

Doctors commonly advise drinking hot water, but some claim its constant use brings on cancer. Filling the stomach with very hot water may do an injury. Keeping the body saturated with water tends to increase the volume of blood and induce high blood pressure on arteries.

THE SKIN.

For A Coarse Dry Skin and Eruptions.

Have druggist make the following powder: taleum powder $\frac{1}{2}$ ounce, oxide of zinc, 2 drams, pulverized camphor 20 grains fine starch 2 drams. Dust this freely over skin.

A Good Skin Food.

Mix thoroughly together the following: anhydrous lanolin 2¼ drams, oil of citron 1 drop, oil of bergamot 3 drops and spirit of mignonette 8 drops.

For a Dirty Looking Face.

The pores are not being thoroughly cleaned. Rub cold cream over the face every night. In 5 minutes wipe off with clean old silk handkerchief. Then bathe face in warm water to which a few drops of benzoin has been added. Rinse face with cold water and then apply cold cream to remain on face all night. Use almond meal instead of soap.

Effect of Coffee on Complexion.

Coffee may cause biliousness and that causes poor complexion. Drink coffee only once a day and lots of water all the time.

For Sun-burned Neck.

Dust neck off with pure rice powder. Then apply following ointment: Cocoanut oil 30 grams, oil of sweet almonds 40 grams, cocoanut butter 8 grams, white wax 4 grams, spermaceti 8 grams and essence of violet 6 drops.

A good Cold Cream.

Cocoanut Oil 30 grams, Spermaceti 8 grams. Cocoanut butter 8 grams, Essence of Violet 6 drops. Oil of Sweet Almonds 40 grams, White Wax 4 grams. This cream is beneficial if massaged into the face before Auto trips. After it is rubbed in, dust rice paper on face.

An Ointment for Acne.

Benzoated zinc ointment, 1 oz. Salicylic acid, 20 grains. Gum camphor, 10 grains.

Care of Acne.

Apply several times a day: Rosewater, 4 ozs., Precipitate of sulphur, 1 dram, Tincture of camphor, 1 dram.

Cure for a Red-pimpled Face.

Spend ten minutes on the face every night. Bathe your face thoroughly with a good pure soap and warm water. Then apply the following ointment: Ergotine 3 grams, Oxide of zinc 7 grams, Vaseline 30 grams.

Too Much Starch Causes Pimples.

Pimples are due to eating too much starch. An abstemious diet, a morning cold bath, followed by a brisk rub, exercise in the open air and sleeping on a porch will be helpful.

For Pimples and Blackheads.

Take plenty of exercise out of doors, correct constipation, eat simple foods, and use: Cream of tartar, ½ oz., Pulverized sulphur, ½ oz., Juice of two lemons. Place these in a jug, pouring boiling water over them and stir thoroughly. Drink one wineglassful every morning on rising. Apply ointment precip-

itated Sulphur $\frac{1}{2}$ dram, lanolin $\frac{1}{2}$ ounce and benzoinated lard $\frac{1}{2}$ ounce.

To Whiten and Soften Skin.

This can be made up at home and used in bath water. bicarbonate of soda 6 ounces, Cream of tartar, 5 ounces, Starch 3 ounces, Oil of lemon 1 dram, Oil of bergamot 10 drops.

For an Oily Skin. (Blonde)

Sulphate of zinc 2 grains, Compound tincture of lavender 8 minims, Distilled water 1 ounce.

Effect of Soap on an Oily Skin.

Soap never made anybody's skin the least bit oily. Soap acts as a tonic as well as a cleanser to the skin, it can be used twice daily or even oftener, without any other than beneficial effects. To counteract that oiliness use this lotion. It should be used once or twice a day, according to need. Rosewater $5\frac{1}{2}$ ounces, Alcohol $\frac{1}{2}$ ounce, Boric acid $\frac{1}{2}$ dram.

A Good Soap for an Oily Skin.

White Castile soap 300 grams, Spermaceti 20 grams, Osgall 10 grams, Honey 20 grams, Essence of rosemary 10 grams, Essential oil of oranges 15 grams, Oil of lemon 20 grams, Alcohol 15 grams, Attar of roses 2 drops.

For Prominent Veins.

These may be due to various causes. If your color is too high, you have been living upon foods too stimulating. Try a glassful of lemonade or limeade every night before retiring. They may also be caused by poor circulation, impure blood or lack of exercise. Outdoor exercise and careful diet are good. Apply the following paste at night. Refined chalk 1 dram, Glycerine 1 ounce, Distilled water 2 ounces.

A Massage Cream That Will Not Make Hair.

Almond oil 8 ounces, Spermaceti 3 ounces, White wax 3 ounces.

For Enlarged Pores.

Elderflower water 1 oz., Rose water 3 ozs., Tincture of Benzoin $\frac{1}{4}$ ounce. Tannic acid 5 grains.

An English Skin Bleach.

Cocoanut Oil 1 pound, Oil of Bergamot 15 drops, Juice of one lemon.

Powder on a Slipper Sole.

The best method of applying face powder is to spank it on with a lambs wool-lined sole such as is used in worsted bedroom slippers.

A Good Skin Cleanser.

Take all bits of fine toilet soap and cut up a cake of good Castile or olive soap into fine pieces. Place them in a saucepan with three-quarters of a teacup of water and melt gently on the stove. Add a tablespoonful of olive oil, and when this is absorbed remove from the stove and add three or four drops of lav-

ender or geranium. Pour into jelly glasses. Wash your face with this night and morning. After your face is clean, apply a tonic made as follows: Remove the hulls from a quart of soft strawberries. Add a little water and place upon the stove until it has become a pasty mass. Strain and add a little vinegar.

THE HAIR.

The Hair Brush.

The best kind is that in which the hairs are twisted on a wire base instead of on a wood back. Clean your brush in a solution of one pint of hot water and two table spoonsful of ammonia. Rinse thoroughly and dry in sun with bristles down. Half a cupful of flour and salt in equal proportions rubbed thru the bristles will make it as clean as new. Or you can lay the brush bristles down in shallow pan of borax water and let it soak for a few minutes, then dip up and down until clean, shake thoroughly and dry.

To Clean Combs.

Combs will soon warp if washed with water. Clean with a good, stiff, dry toothbrush, and wipe upon a piece of soft tissue paper. Dip in ammoniated water once a week.

A Shampoo for Gray Hair.

Use white soap, as any other kind is liable to leave the hair yellow.

To Keep the Hair Dry and Curly.

Wash the hair thoroughly with a good shampoo of castile soap and warm water. With a soft sponge apply once a week, with particular care. Bay rum 1 quart, Alcohol $1\frac{1}{2}$ pint, Water $1\frac{1}{2}$ pint, Tincture of cantharides $\frac{1}{4}$ oz., Carbonate of ammonia $\frac{1}{4}$ oz., Carbonate of Potash $1\frac{1}{2}$ oz. Afterward apply this mixture to keep the hair in curl: Tragacanth $11\frac{1}{2}$ drams, Rose water $11\frac{1}{2}$ pints, Oil of almonds $\frac{1}{4}$ dram.

A Good Shampoo.

Beat an egg, (yolk and white together), then add teaspoonful of liquid of green soap. Rub shampoo well into scalp. Rinse with three waters, hot, tepid and cold. A lemon rinse after the shampoo cleanses the hair of soap and makes it light and fluffy.

For Luxurious Hair.

Shampoo every two weeks with warm water and Castile soap. Use the following hair tonic: Tincture of Cantharides 2 drams, Bisulphate of Quinine 10 grains, Castor Oil 1 dram, Bay rum 6 ounces.

To Stop Falling Hair.

Rub olive oil or plain beef marrow well into roots of hair at night, and once a week shampoo your hair with a good pure soap. When dry apply the following tonic: Alcohol (95 per cent) 4 ounces, Quinine 15 grains, Castor oil $\frac{1}{8}$ oz., Oil of bergamot 10 drops.

Shaving.

Hot water opens the pores temporarily and thus allows a thicker film of lather to stick on. It softens the beard and makes a richer lather. A razor placed in hot water before using, will shave better.

When Shaving Under the Arms.

Observe antiseptic precautions to avoid infecting cuts sometimes caused by even a safety razor. Before shaving, wash thoroughly with castile soap and bathe with seventy per cent alcohol. After shaving apply more alcohol.

Cause of Baldness

Wearing of stiff hats prevents proper nourishment reaching hair cells. Dandruff, thinning of the scalp and poor condition of hair are also caused by hat compression.

When Hair is Stiff and Hard.

Shampoo your scalp thoroughly once a week with a good tar soap or castile, if preferred, and afterward apply this tonic: Oil of mace 2 grams, Essence of rosemary 60 grams, Oil of sweet almonds 30 grams.

When Hair is in Poor Condition.

Look after your general health. Keep the scalp cool, clean and moist. Olive oil is good for moistening the scalp if too dry. Apply a good hair tonic frequently and encourage a new growth of hair. Use the following: Glycerine 2 ounces, Alcohol 1 pint, Sulphate of quinine 1 dram, Oil of cloves $\frac{1}{2}$ dram, Oil of lemon 4 drams, Oil of bergamot 1 dram.

To Darken the Hair.

Massaging the scalp with a small quantity of olive oil at night, will in time, turn hair an entire shade darker, without harm.

For Dandruff.

Shampoo the head every few days, thoroughly cleansing each time. Warm water and good castile soap make an excellent lather which should be well rinsed out afterward with tepid water. Your brushes and combs must be kept clean. Dry your hair in the sunshine and fresh air. Brush it gently two or three times a day. As a tonic, try this: Sweet almond oil 3 ounces, Oil of bergamot 10 drops, Oil of rosemary 1 ounce.

Massage your scalp occasionally with cocoanut oil and try the following: Castile soap $\frac{1}{2}$ cake, Borax (powdered) 4 teaspoonfuls, Bay rum 1 ounce, Italian Pink 20 drops, warm water 1 quart.

Boric Acid for Dandruff.

Use boric acid about a 5 to 10 per cent solution for massaging the scalp. It should not be used more than once a week. It may prevent baldness.

For Dandruff and Thin Hair.

Wash your scalp with pure soap and soft water, followed

by a massage with carbolated vaseline or a little resorcin, quinine, or dilute benzoic or boric acid.

For Thin Oily Hair.

Massage the scalp three times a week with it until an improvement noted. Bay rum 3 ozs., Oil of rosemary $\frac{1}{2}$ oz., Tincture of cantharides $\frac{1}{2}$ oz.

THE FACE.

Try This for Your Lips.

You should massage your lips a little every night before falling asleep. Do not bite or pinch them. For lip massage, use this pomade: Oil of sweet almonds 125 grams, White wax 28 grams, Spermaceti 28 grams, Oil of bergamot 1 gram, Oil of geranium 2 grams.

To Thicken Upper Lips.

Gentle massage with the second finger of each hand toward the middle of the lip with a nourishing oil, as: Almond oil 1 oz., Extract of violet, 6 drops. This should feed the tissues and gradually enlarge the lips. Study before a mirror your manner of holding the lips. Perhaps you compress them too tightly.

For Mouth Wrinkles.

Honey 3 ounces, Isinglass $1\frac{1}{2}$ drams, Pure vinegar, preferably that made from white wine 1 pint, shredded red sandal wood $\frac{1}{2}$ dram. Wash the face thoroughly with warm water and a pure soap. Then gently massage the cheeks firmly upward and outward with a rotary motion of the second and third fingers. Now close the hands and with a light tapping motion like the patter of rain drops follow the muscles backward toward the lines of the ears. Keep this up every night for several months.

For a Double Chin.

Try the following the astringent and massage the skin underneath the chin gently upward, using the tips of the fingers: Camphor water 3 oz., Alcohol 1 oz. Chin bandages are also of great benefit, if worn regularly at night for six months or more.

For a Flabby Chin.

Try wearing at night a chin bandage that has been moistened with this astringent lotion: Iodide of potassium 30 grains, Distilled water 1 pint.

Buttermilk Bath.

Bathe face freely with buttermilk. Some claim best results if milk is washed off with tepid water after it has stayed on face about half an hour.

THE BODY.

For Excessive Perspiration.

For the hands and feet, use solution of formaldehyde (U. S. P.) four ounces. Dissolve one tablespoonful in a quart of water and use externally as a lotion.

Drugs like agaricin and picrotoxin, are very effective in checking excessive perspiration, but must be taken under direction of a physician. Cold bathing will aid greatly in toning up the sympathetic nervous system, which is at fault.

Internally take Elix of the Glycerophosphates (N. F.) four ozs. One teaspoonful after meals in water.

For Perspiring Hands.

Hands of artists which perspire unduly from nervousness can be greatly relieved by bathing the palms with: Bay rum, 3 oz. Tannic acid 6 grains.

For Perspiration Under the Arms.

Wash the parts affected with tea made of white oak bark. If the perspiration has disagreeable odor wash the parts affected with: Water 1 pint Rescorcin, 1 ounce.

Soda in Your Bath.

A little bicarbonate of soda added to the water in your bath will absolutely kill the odor of perspiration.

To Reduce the Bust.

Before retiring massage every night into the breasts the following mixture; oil of sweet almonds 100 drams, white wax 50 grams, tincture of benzoin 25 grams, rose water 25 grams, tannin 25 grams. Sponge off mixture in the morning and apply a little cold cream.

Exercise To reduce Waist and Hips.

Place the hands on the hips and bend the body from the waist, moving the upper body in a complete circle. Raise the right leg with knee straight sideways, then swing leg diagonally across the left and stamp right foot upon the ground, and then swing back and repeat with left leg across right.

THE TEETH.

The Value of the Teeth.

“No woman can be beautiful without good teeth, and no woman can be plain with them”—Voltaire. Beauty of expression is from within and depends upon disposition, temperature, attitude toward life and others, and upon the facial features, especially the teeth.

The smiling woman must look to her teeth. If not straight they can be made so. The mouth must be cared for too and the breath sweetened. Soda and water used occasionally will correct acidity and prevent tooth decay. Avoid food that is too sweet, too sour, too hot or too cold.

How to Brush the Teeth.

There are two ways of damaging the teeth, neglecting to brush them and brushing them the wrong way. A stiff brush and coarse powder forces the gum back and opens the door for the bacteria, always in the mouth, and leads to many diseases. Use only a downward motion on the upper teeth and

upward motion on the lower teeth. Terrated bristles are the most effective.

For Discolored Teeth.

Mix together sugar of milk 200 grams, powdered catechu, 3 grams, oil of peppermint, 4 drops, oil of anise, 4 drops, and oil of orange flower, 4 drops. Use once a day with soft toothbrush.

Cleansing Fluid.

Mix ten drops of tincture of myrrh in a wine glass full of water. Rinse the mouth or brush the teeth.

Good Tooth Powder.

Precipitated chalk $\frac{1}{2}$ lb. Powdered borax $\frac{1}{4}$ lb. Powdered orris root $\frac{1}{4}$ dram.

Good Mouth Washes.

Lemon juice in water makes a good mouth wash and helps to remove tartar from the teeth.

Thymol 3 grains, Alcohol 3 ounces, Benzoic acid 40 grains, Tincture of eucalyptus 3 drams, Essence of wintergreen 5 drops.

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Cleansing Fluid.

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Toothache.

To prevent toothache keep the mouth and teeth clean. Go to a good dentist once in six months, whether you know you have any trouble or not, and let him examine your teeth for cavities and for pyorrhea, a modern deadly foe to teeth, which taken early can be cured, but delay in treatment renders disease incurable.

If tooth is aching by reason of cavity, fill cavity with absorbent cotton, saturate with vaseline and dipped in burnt ale. If gum is aching, with pyorrhea take 5 grains of aspirin at night, followed in two hours by 5 more if pain does not ease up, until you can get to the dentist.

THE HANDS.

After Peeling Onions.

After peeling onions, rub hands with celery or parsley to counteract the odor.

For Red Hands.

Use the following lotion: Lemon juice 1 oz., Glycerine 1 oz.

When Washing Pots and Pans.

Don't use washing soda, except in solution. Two tablespoonfuls of soda are enough for a large tub of water. Scrape the inside of your pots and pans with a wooden paddle beforehand, then scrub with a soft brush dusted with some fine powder.

For the Hands.

Juice of two lemons, two oz. glycerine, and a few drops of carbolic acid, shaken together. Add two tablespoons water and shake. Clean the hands and rub the mixture into them.

To Make Your Nails Shine.

An excellent liquid polish for the nails is made of 2 drams of diluted sulphuric acid, 1 dram of tincture of myrrh, and rose water enough to make four ounces. Dip the nails in this solution, wipe and polish with a chamois skin.

For White Spots on the Nails.

Rub your nails every few days with lemon juice. Also watch carefully after the general state of your health. If your liver is bad, then the white spots are likely to become more prominent. For the soft, dull effect, try the following mixture, which will restore them to their former hardness and brilliancy: White wax 250 centigrams, Nut oil 15 grams, Resin 5 grams, Alum 1 gram.

For Brittle Nails.

Nails inclined to brittleness should be treated daily with a little pure white vaseline. The vaseline should be well rubbed over and into the nails, and worked into the under part just above the finger-tip.

To Avoid Chapped Hands.

After having the hands in soapsuds wash them in vinegar to make them soft and white and prevent their chapping.

For Stained Fingers.

Vegetable and fruit stains on the fingers can be removed by dipping in very strong tea for a few minutes and then washing in warm water.

For Moist Hands.

A good remedy is bathing them in a lotion consisting of one-fourth ounce of powdered alum and one teaspoonful of spirits of ammonia in a pint of boiling water.

Mustard for the Hands.

Ground mustard is excellent for cleaning the hands after handling onions and other strong smelling things.

Scratches on the Hands.

Clean the hands with warm water and then rub on as necessary, the following mixture: Suet 1 oz., Glycerine $\frac{1}{2}$ oz., Camphor 20 grains, after the same has been well stirred together.

For Ink Stains on the Fingers.

Wash the hands thoroughly in warm water. Soap them plentifully, then rinse in cold water and rub gently with pumice stone or slice a piece of Castile soap into thin shavings and place in enough water to cover; let melt over slow fire. And when melted, pour in a teaspoonful of powdered pumice stone

and when the mixture is cold, roll into a round ball and rub on the fingers. Also try the brimstone on a match.

THE FEET.

To Prevent Frost Bite.

Pour melted glue over the feet, especially about the toes. As the blue dries it makes a superior non-conductor and retains the heat of the foot so that soldiers so treated are able to march for days in severe cold without frost bite.

A Simple Remedy for Corns.

An English physician recommends boots with extra thick soles and wearing of two pairs of socks, a thin one next to the skin and a heavy woolen pair over these. Change shoes every day.

Wear properly fitting shoes which allow space for the normal expansion of the arches in walking or standing. Merely loose shoes exert pressure on the projecting points where corns form. It is well not to wear the same pair on consecutive days. Abnormal pressure may be due to weakness of the arches, in which case a physician should be consulted. If you are overweighty the pressure is increased, so reduce diet. Perforated felt may be worn over the corns. Inflamed corns are relieved by cold, wet compresses. Soft corns should be relieved from pressure by small felt rings, surfaces to be separated. Oxide of zinc powder lessens moisture. Bathing the feet in cold water in the evening and putting on dry hose after exertion and perspiration serves to prevent soft corns.

Speedy removal of corns and calluses may be effected by painting twice a day with a solution of salicylic acid.

Salicylic acid 15 grains, Extract of Cannabis Indica 8 grains, Alcohol 15 drops, Ether 40 drops, Flexible collodion 75 drops. In applying this avoid the healthy skin. Use a camel's hair brush. Continue for a week and the corn will fall off and calluses as well. Bathing the feet in hot water will help the process of separation. The salicylic acid may be used in the form of an ointment, as follows: Salicylic acid 20 grains, Benzoinated lard $\frac{1}{2}$ ounce.

Slippers a Cause of Corns.

The loose slipper used in the house is a prolific cause of corns. Half the time that pain can be traced to the wearer's most comfortable footgear. A slipper for the house should be of exactly the same shape as the shoe worn out of doors. It may be as light as desired, but it should be snug. The bedroom slipper is a dangerous thing for the feet. It may be that one's feet grow tired but the feet should be rested by keeping the weight of the body off the feet. In the house, have a pair of slippers as trim as your shoes, but kick them off everytime you sit down. Wear shoes that you can slip off easily. Not only will this prevent corns, but the shoes will last twice as long.

Care of Ankles and Feet.

Take extra care with your ankles because changes in the weather affect your feet after they have been constantly exposed to extremes in temperature. Keep the circulation of the blood in perfect condition. Do this by taking hot and cold baths, alternately, with regularity. Dry the feet carefully and rub them ten minutes with alcohol and witch-hazel. Poor circulation results in excessive perspiration; this creates a condition causing discomfort. Taking care of your feet is a habit as caring for the hands, the face, or the hair. Give up ten minutes every night to massaging the foot with alcohol and you will obtain results.

Sensitive Feet.

Tender feet are among the most troublesome complaints, especially in travel. This powder sprinkled into the shoe and stocking and about the feet, particularly between the toes, will afford relief: Talcum 40 drams, Lycopodium 4 drams, Alum $\frac{1}{4}$ dram. If you cut the foot, bathe it instantly in hot water, and immediately after in this antiseptic lotion: Glycerine 10 ozs., Carbolic acid $\frac{1}{4}$ oz.

You should bathe your feet in warm water twice a day, drying them carefully afterward. Try this: Hot water 5 quarts, Boric acid 200 grams, Tannin 5 grams.

Tired and Swollen Feet.

Every night bathe your feet in rosemary leaves. Steep the rosemary leaves, a half an ounce to a gallon of water. When cool bathe the feet for twenty minutes, adding warm water now and then as that in the basin cools.

Blistered Feet.

Are due to excessive perspiration and decomposition of the secretion due to heat. The secretion may be controlled and the irritation removed by using; solution of formaldehyd, U. S. P. 4 ounces. Dissolve three teaspoonfuls of this in a quart of water and bathe feet for five minutes every night. Let dry without wiping. Bathe the feet first in plain cold water.

Buy a corn plaster and remove the active wax from over the hole, place over blister and keep it safe from contact with shoe. If you stick the blister with a needle, which has been held in a flame sprinkle with zinc oxide powder, and cover it with a strip of adhesive tape, you will do what the army requires its men to do.

Chilblains.

Paint the affected region with tincture of iodine, and when dry, swab it with pure ichthyol. Then press cotton down into the sticky ichthyol until no more will stick. The stocking protects the region, and the dressing should be kept dry and unmolested for five days. This will relieve the itching and will cure.

Take two ounces of dilute hydrochloric acid U. S. P., and apply to the parts two or three times a day. In some cases it is ineffective. Be sure to get the dilute acid as the concentrated acid would eat the foot.

Bunions.

Buy a new pair of very broad, low-heeled shoes and wear them until the swelling is reduced. Try painting it three times a day with the following mixture: Tincture of Iodine 2 drams, Glycerine 2 drams.

Ingrowing Nails.

This is caused by wearing ill-fitting shoes and improper trimming of the nails. To avoid this, select shoes that permit toes to extend outward from the foot on a straight line axis through the metatarsal bones. The toe-nails should be trimmed square across and left of a sufficient length to cover fully the top of the toe.

For Chapped Hands and Feet.

Five cents worth each of white wax, spermaceti, powdered camphor, sweet oil and glycerine makes an excellent remedy.

Weak Arches.

Wear a shoe with a broad, stiff shank, broad, low heel, a rounded toe, a straight last and lift of an eighth or a quarter of an inch on the inner side. Tip-toe exercises are good; raise the body on the toes quickly, then sink slowly, resting the weight on the outer borders of the feet, the toes being turned in throughout. Repeat thirty times, in bare or stockinged feet. If you are overweight, rid yourself of surplus flesh. If in poor condition generally, have tonic treatment. When your feet become strong a shoe with a flexible, instead of a stiff shank, may be better for you, since it permits a more natural play of the muscles that control the arch.

Arch supports give immediate relief and sometimes cure the trouble so that they can be discarded.

Away with corns.

Here is a simple home remedy that will do away with corns. Mix pure lard and baking soda thoroughly to a salve and apply night and morning. Cutting while giving temporary relief, only makes the skin hard and increases the tendency to deeper corns. Soak the feet in weak borax water or in a gallon of water containing a handful of baking soda. After soaking the feet twice a day for a week, in one of the solutions the corn can be rubbed away, unless it is deep-rooted, in which case patience and more soaking.

A Cure for Sprained Ankles.

Take a strip of adhesive plaster about two inches wide and twelve inches long. Starting about the lower third of the leg, bring it down under the arch of the foot and up the opposite

side of the ankle, drawing it tightly under the arch. Overlap this about one-half inch with another piece the same width and length.

Then using one inch wide adhesive, start from the heel and apply short strips, each one overlapping the other by about one-half inch, to meet and overlap the broad strip on both sides, running these strips up as far as the lower third of the leg. Over these narrow strips apply two inch strips of the same length, starting from the same point and running up the same distance, each one overlapping the other. Then draw a couple of short wide strips tightly under the arch, and a narrow strip under the sole of the foot and up the course of the tendon Achilles. Leave a space free over the top of the foot, not less than one-half inch, and the strapping will not interfere with the circulation. After the strapping has been applied, apply an ordinary gauze bandage for a few hours to make the adhesive adhere to the foot and prevent the edges rolling up.

It would then be well for the patient to begin walking around.

For Perspiring Feet.

Wash feet with five per cent solution of permanganate of potassium, every night or paint them with five per cent solution of salicylic acid in alcohol.

THE EYES.

Refresh the Eyes.

Bathe them in salt water. Shade your light, as a dead-white light is very trying to the eyes.

After Mortoring.

Wear smoked glasses to prevent squinting which makes wrinkles. When the eyes are tired and smart, dip the face in a basin of water and when the eyes are completely under, open and shut them once or twice. You will be wonderfully refreshed.

Puffiness Under Eyes.

This indicates a condition that demands the service of a physician.

Reading.

Avoid direct reflected light from the lamp. If the light hits the book sideways from above the sheen will not be seen, for in this position a mirror would not show the reader an image of the lamp; the light should come over the left shoulder.

Sewing.

If you value your eyesight, do not do fine needlework by anything except a strong direct light. The new indirect lighting, is not the best for sewing.

For Your Eyeglasses.

When the tiny screws in your eyeglasses need tightening, you will find that a small steel pen answers admirably as a screwdriver.

To Improve Eyebrows.

Light massage with olive oil is good for the eyebrows as well as the lids. Stroke from nose to temple with light brush.

For the Eyelashes.

Trim the ends of your lashes carefully with a pair of curved scissors. By keeping the eyes thoroughly clean you will do much to help the eyelashes. Bathe them night and morning with an eye cup filled with equal parts of witch hazel and water.

Eyes and Brows.

When the eyes are tired and lids have a streak of vivid red inside, the sufferer needs glasses or more fresh air and sleep. The night and morning use of an eye cup, filled with tepid water salted with as much salt as will cling to the end of a wet finger, will relieve. If bad headaches accompany the trouble, glasses are needed, and these may be discarded later.

BLEMISHES.**Freckles.**

If you freckle easily, keep out of the spring sunshine. This pomade makes freckles less conspicuous, if it does not remove them. Apply every night: Sulphate of zinc (powdered) 20 grains, elder-flower ointment 1 oz.

Warts.

Remove the pulp from a lemon, cut the skin in squares half an inch in size, place in flat dish and cover with strong vinegar and let stand 24 hours. Then place a piece of lemon skin, white side next to the wart. Bind on securely and leave for three or four hours. Do this once a day for three days and the wart will gradually disappear.

Cold Sores.

Cold sores are often successfully treated with sweet spirits of nitre. Dip a little absorbent cotton into the nitre and press it repeatedly upon the sore.

Cold and Croup.

Inhale ammonia through nostrils, closing first one and then the other or take vinegar of anemone, sniff into nostrils from the hollow of hand, or use finely powdered camphor as snuff. When exposed to chilly atmosphere, inhale deeply and hold the breath for a half minute.

For Cold In The Head.

Use powdered borax snuffed up the nostrils. Camphor is also good.

Other Remedies For Colds.

Put pulp of one medium sized grapefruit without seeds, into

one quart of cold water, and boil slowly to one pint. Strain and sweeten, drink one half the quantity hot after retiring at night and the other half cold in the morning or put five or six drops of camphor in one half glass of water; take teaspoonful every twenty minutes.

Croup Remedies.

Shave or grate about a teaspoonful of alum, mix with twice as much sugar, take at once. Coal-oil on sugar cures obstinate cases.

A Gargle For Hoarseness.

Put into glass of water, one teaspoonful of salt, one teaspoon soda, one teaspoon of glycerine.

To Relieve Colds.

Put one tablespoon of benzoin into a quart of boiling water, in a wash-bowl, lean over it with head and bowl covered, inhale deeply. Use warm or cold applications; inhale salt and water. Exercise, keep bowels regular, wear light underwear, and in winter, heavy outer garments. Spray nose and throat with menthol, eight grains, camphor five grains, liquid vaseline, one ounce.

MISCELLANEOUS.

Lacquer.

Genuine lacquer is expensive. There are many imitations. Japanese lacquer on wood or china, will not burn off; hot liquids take off imitation lacquer and cause injury to stomach. Imitations peel and crumble.

Indications Of Consumption.

(1) A cough lasting more than a month, (excepting whooping-cough.) (2) Hoarseness, lasting several weeks. (3) Poor appetite, indigestion, loss of weight and strength, paleness and a run down condition. (4) Hacking and spitting, especially in the morning. (5) Night sweats. (6) A streak of blood in the sputum. (7) Afternoon fever.

Ear Ache—To Relieve.

Use hot water from an ear syringe. Steam from wet flannel over a hot stove-lid.

Your Ears.

Never box a child's ears. A single blow may deafen him. Do not, without doctor's orders, pick the ears, put in cotton or syringe, use poultice, put drops in, or blow into child's ears; nor douche the nose as this may wash germs into tubes leading to the ears.

Postage Stamps Spread Disease.

Postage stamps carry germs. In 48 tests out of fifty, bacteria were found. There is danger in wetting the gum with the tongue.

Insomnia.

Bind a towel wrung out of cold water, wrap around the throat.

For Uric Acid in Blood.

Eliminate flesh food of all kinds, even fish, alcohol in any form, rich soups, fried foods, radishes, asparagus, tomatoes, dried beans, candies, pies, pastries, tea and coffee. Eat cereals, fresh fruit, milk and fresh vegetables. Drink much water. Daily exercise in open air and bath are imperative. Keep bowels open. After meals try one teaspoonful of this mixture; Salicylate of soda 3 drams, simple elixir 2 ounces.

For Rheumatic Swelling.

Put lemon juice into milk until it curds and then bind over swollen parts.

Acidosis.

This a condition where the fluids of the body lose their alkalinity. Improvement may be had by fasting a day and a mono-diet. Begin with pure milk in moderate quantity. If sweet milk is not tolerated try sour milk. If condition continues try an egg diet and then a fruit diet and then a vegetable diet.

Building Up by Dieting.

If bodily sound and teeth are good, your underweight is due to poor dieting. It is impossible to lay out one diet as most beneficial for all persons. Study your case by experiment. For building up purposes the following are good; one half glass of cream with balance milk, milk and raw eggs, whole wheat bread, succulent vegetables, buttermilk, olive oil, cod liver oil and oat meal. Sugar is fattening to some. The above food with plenty of exercise, sleep on a sleeping porch, a morning bath as cold as you can stand should bring results.

To Develop the Bust.

Take deep breathing and pat olive oil gently into the bust before retiring and eat nourishing food and keep your general health good. Try this exercise; place the clenched hands above the bust and extend the arms straight forward, then back and forth again with quick vigorous motions. Also try rubbing into the breasts before retiring the following mixture; 100 grams of fresh lard, 20 grams of 80 per cent alcohol, 11 drops of rosemary and 11 drops of essence of bergamot.

Gas In The Stomach.

Eat slowly. Avoid fried foods, pastry, cake, sweets, thickened soups and gravies. Masticate food properly and have dental defects remedied. Use water injections.

Bran Relieves Constipation.

It acts like a foreign body, and stimulates the muscles of the bowel walls to contract more vigorously and prevents constipation, which results from dryness and stagnation.

Castor Oil.

Use when irritating substances, such as undigested food, foreign bodies and micro-organisms, are retained within the intestinal tract, causing diarrhea, etc.

Nutmeg Aids Digestion.

A drowsy state after meals is good, for it helps digestion, because it increases the flow of gastric juices. If the appetite is poor, the digestion is feeble and then nutmeg is beneficial.

Why City People are Nervous.

Most ailments affect your nerves. Eye-strain is one cause. City folks who live and work where vision is restricted suffer from nervous troubles. Living in narrow streets, gazing across alleys at brick walls, rushing into narrow cars and small rooms keep the vision within narrow limits produces eye strain and this in turn nervous trouble. Eye strain is uncommon in the country.

Working in a stooped position, curving the spine brings pressure on tiny blood vessels and reacts on nerves. Sedentary occupations in city produce nervousness. Liver troubles produce nervous disorders and so do city noises. Even at night there is continuous noise in a city. Excessive blood pressure makes nervous women suffer and others about them.

For a Nervous Headache.

Try a cup of moderately strong tea with two or three slices of lemon dropped into it, or try a mustard leaf or hot wrung out cloths on back of neck.

Chorea, or Extreme Nervousness.

Rest mind and body. Keep out doors and away from all strain eat plenty of good food. Keep a child from school. Get plenty of sleep in well ventilated room. Take hypophosphate or iron. Chorea if associated with rheumatism may effect valves of heart. The best remedy is arsenic under direction of physician.

For a nervous Child.

Warm bathroom comfortably, fill tub with hot water at 100 degrees. Let child play awhile in the water with playthings.

Medicine Closet.

Keep medicines in a cabinet where light is excluded. The best antiseptic is bichloride of mercury. Be careful, it is a strong poison.

Shoulders And Neck.

Beautiful shoulders are symmetrical, soft not muscular, of firm flesh, plump in front, thin at the back, sloping gently into arms. Bust and back must be white and of satin texture. Deep breathing makes rounded shoulders, health and beauty.

For Hollows In Neck.

Apply the following cream to the neck, night and morning, with a rotary motion: Glycerine 5 oz., Mutton tallow 1 pound,

Tincture of benzoin 2 drams, Spirits of camphor 1 dram, Russian isinglass 1 dram. Or Cocoanut oil $\frac{1}{2}$ pound, Spermaceti $\frac{1}{4}$ pound, White wax $\frac{1}{4}$ pound.

To Develop Thin Legs.

Walk uphill, if possible, until weary and take plenty of nourishing, flesh-building food.

To Reduce Fat Shoulders.

Massage as near the bone as possible, with the following lotion: Rosewater 12 ounces, tincture of benzoin 1 ounce, tannic acid 20 grains and elderflower water 4 ounces. No oils or creams.

To Heal Ulcers.

Rest in bed and apply following ointment: Olive oil, one ounce, Diachylon ointment, one ounce. Elastic stockings will prevent recurrence. Diet should be milk, cereals, fruit and vegetables, with much water. Eat just enough to satisfy hunger. Exercise in open air. Massage is beneficial, as also tepid baths. Keep bowels open. Take half a teaspoonful of bicarbonate of potash well diluted in water, before meals.

For a mustard Paste.

Use white of egg instead of hot water. It will not blister. Warm camphorated oil is even better.

Sleep-walking.

The chill of a strip of metal placed on the floor beside the bed, so wide that his feet cannot miss it will arouse him.

To Cure Writer's Cramp.

A period of rest, with massage, outdoor exercise daily bathing, electricity and tonic. For the nervous weakness, one pill after each meal of $\frac{1}{10}$ of a grain of phosphide of zinc.

For Toothache.

Apply piece of cotton saturated with ammonia. Or apply equal quantities well mixed of powdered alum and fine salt to gums, with moistened finger in powder, rubbing gum well and putting a little in tooth.

Sick Headache.

Use lemon juice and water. A wineglass of lemon juice in water three times a day is good for rheumatism.

Pains in shoulder and tired feeling.

Perhaps the tonsils are at fault, or there is obscure dental trouble. Use X-Ray to discover abscesses on roots.

The tonsils or the teeth are the cause of much neuritis.

Relieve irritating rashes.

Powder thickly with corn starch, or good unscented powder.

Boils.

Try a poultice of stewed apples.

Relief from prickly heat.

Mix a large portion of wheat bran with cold or lukewarm water and use as a bath. Two or three times a day.

Felon.

Dip the felon frequently into a solution of one gill of vinegar and one tablespoonful of saleratus, heated.

Care of House

House Cleaning.

Send away, all rags, blankets, etc., to be cleaned out of the house. Have all painting and repair work done before any cleaning is started to avoid tracking in house. Get hardware and supplies needed. Clean the closets and lay away clothes, keeping all waste in convenient boxes to be carted away by charitable agency. Last, clean each room separately, ceiling, walls floor and movable furnishings. Wash clothes closets twice a year with weak solution of carbolic acid.

To Clean Mattress.

Place mattress in the sun. Cover spots with a thick paste of wet starch. Rub off in a couple of hours and if not clean repeat. To clean coiled bedsprings, take a dish mop, dampen with kerosene.

A Dustless Duster.

A good "dustless" duster can be made of a pair of old stockings, slit open, stitched together and then soaked in coal oil for several hours before hanging in the air to dry.

A Dustless Cloth.

Cut open (the long way) four long stocking legs. Stitch these on the machine to make a large square. Soak the square for twenty-four hours in a solution of one quart of kerosene, one cup of gasoline and one tablespoon of linseed, cheap salad or olive oil. Hang the cloth in the open air for a day and night to dry out and it is ready for use.

Cleaning Floors.

Never use water on a waxed hardwood floor. To clean these apply with a soft cloth a solution of 2 parts crude oil to 1 part benzine. When floor has been cleaned, close the room for a couple of hours. Be sure that the floor oil is well dried after using.

The short ends of candles melted and mixed with equal parts of turpentine makes a fine polish for hardwood floors.

To protect wall paper and tinted walls when cleaning baseboards, lay along the upper part of the base-board a metal strip 3 inches wide and 2 feet long flat against the wall paper and this will prevent it being soiled.

Paint spots can be removed from hardwood floors by applying kerosene and then rubbing with a soft cloth rung from luke-warm water after which oil the floor.

To remove ink spots, scour the spots with sand wetted in oil of vitrol and water and when removed rinse with strong perlash water and then oil.

A soft window brush can be used for sweeping a floor instead of a broom, as it takes up all the fine dirt with better result.

To Stop Floors Squeaking.

Apply a little liquid glue in the cracks between the boards by dipping a thin strip of metal or a knife blade in the glue and inserting carefully in the cracks at the point from which the squeak comes. Move the blade about slightly to remove the glue and make it stick to the flooring. It will dry in a short time and stop the squeaking.

To Clean Woodwork.

To the woman with a family of small children the question of keeping the woodwork free from finger marks is difficult indeed. Dip a cloth in paraffine oil and rub the spots. They will immediately disappear.

To Clean White Enamel Woodwork.

Use only a good white soap and warm water and have a generous saucer of whiting into which dip the cloth and apply to enamel; then rinse with clear water and dry. It will clean beautifully and will be much appreciated where gas or coal furnaces are used. To wash white paint. Use 2 parts milk and 1 of water with a little ammonia in it.

For Greasy Woodwork.

Paint or woodwork that has become greasy should be cleaned with a cloth dipped in turpentine. Then wipe with a cloth dipped in water to which a little kerosene has been added. A quick and easy way of cleaning paint is to have two pans of water—one cold, to which a tablespoonful of ammonia has been added, and one hot, with a little ammonia and soap powder. With a soft flannel wash the paint with the soapy water, then rinse with the cold, using a wash leather wrung fairly dry. Paint washed like this dries with a nice polish which no amount of drying with cloths and using hot water alone will give.

Oil for woodwork and furniture.

Kerosene used to be considered excellent, but to-day experts believe that cedar and other oils are preferable. Use some of the prepared oils sold under various names to be used with "dustless" mops, etc., or an inexpensive oil good for all woodwork except mahogany or white maple is: Benzine 1 part, Crude Oil 2 parts.

Buy at paint store, mix well and always shake thoroughly before using. Buy about a gallon for general household use.

Tightening Spigot.

The tightness of a water spigot depends only upon the little leather washer on the bottom of the stem running down from the handle, and on the thread packing on the top of this space. Get a new washer or make one, cut off the water, unscrew the nut holding the handle in. Take handle out, take off the old washer and packing and replace with new. It is an easy operation and can be done satisfactorily by any one.

Cleaning Household Drain Pipes.

Cleaning drain pipes of the house is necessary. Procure a gallon of coal oil, pour some in each tub or basin of every bath-room, giving the overflow pipes in the basins a good dose of the oil, as they get badly clogged, too. Then proceed in the same manner with the kitchen and pantry sinks. Give each stationary tub in the laundry and the laundry drain a goodly portion of oil.

Many people use lye in the kitchen sink, which makes soap when comes in contact with grease, then the sink is clogged.

Late at night is a good time to use the oil, letting it stand over night, then flushing out with hot water in the morning.

Remedy for Leaking Water Pipe or Dripping Faucet.

When a water pipe springs a leak, before sending for the plumber go to the basement and turn off the water. To do this, find the stop cock and turn it as one would a water faucet. It looks just like a large faucet, and usually can be turned with the hand. Turn it slowly, until sure it is being turned in the right direction; a hasty turn the wrong way may cause a small flood in the cellar.

Often a dripping faucet can be remedied without aid from the plumber. With a wrench unscrew the faucet and see if the washer is worn or has slipped to one side.

If the metal of the faucet is worn so the threads fail to catch properly, a plumber will have to be called or a new faucet bought and set on, but if the washer is causing the trouble, it is easily replaced.

Dirt Coming Through Hot Air Registers.

To keep dirt from coming up through hot air registers in the floor, take square piece of cheesecloth and double it. Lift the register from the floor, turn it upside down, fasten the cloth to the bottom with a cord so as to allow the cloth to hang loose, place it back in the floor and the results will be wonderful. Clean the register every sweeping day.

To Stop a Leaking Water Pipe.

Moisten some ordinary yellow soap and a little whiting into a thick paste and place some of this over the leak until the plumber arrives.

Microbes in Standing Water Pipes.

On your return from vacation, don't forget to let the water run for some minutes; it will put you on the safe side as regards water microbes. The pipes and drains in a house, soon fill with sediment and an unhealthy odor is the result. If flushed each week with a copperas or 5 % Carbolic solution they will always be in excellent condition.

Sewer Gas.

To detect sewer gas, hold a lighted taper over the water as the trap flushes. If the flame is drawn slightly downward, all is

well; if it flutters upward, this is sewer gas. The taper flame of course will burn up; one must judge by the fluttering and swirling caused by little currents of air. Where a slow steady escape is suspected, put a lighted candle in a low candle stick and set it in the closet, either on the floor or close beside the trap. Shut the room tight for three hours. If there is any amount of sewer gas it will settle and extinguish the flame.

Or take a bright silver spoon, put it close to the suspected spot and leave it there for twelve hours. If there is even a trace of sewer gas, the silver will be blurred and will begin to tarnish.

For Gas Leaks.

Make a paste of common brown laundry soap and water by letting a piece of soap soak in the water until soft. Then put a thick coating of it over the leakage. In time the soap becomes hard. This is good for all time in mending small leaks without a plumber.

Save the tube connecting your gas stove by always turning it off at the stopcock that supplies the tube.

It is a safe rule never to put anything in any plumbing vent that cannot be dissolved in water.

Learn the location of the stopcock, also how to turn off the electricity and water. Learn to read all these meters and save money.

Gas in a pipe is usually at a very low pressure, enough to hold up about three inches of water, or about two ounces to the square inch. Ordinary soap rubbed over the moistened surface of the leaking joint and plastered down works very well, indeed.

Dust Pans.

There are several kinds of dust pans mounted on long handles, the idea being that the person using them does not have to stoop. The most convenient type is mounted on a metal handle and is collapsible. It has a closed cover, so that when the dust is once picked up it is held in until emptied.

Homemade Mop.

Take a worn out broom. Divest it of its straw and fasten an old stocking over the straw end. Then cut into strips the legs of other old stockings 12 inches long and 1 inch wide. Sew these strips to the covering of the broom handle around in rows an inch apart. Dip mop into a mixture of equal parts of kerosene and paraffine and dry. Keep it moist by rolling tight and wrapping in paper bag.

To Clean An Oil Mop.

Hot water, ammonia and little washing powder will clean an oil mop after water and soap have failed.

Walls Absorbing Light.

Covering the walls with unsuitable materials and using improper fixtures is said to waste \$33,000,000 worth of gas in this country each year. The best reflector is white cartridge paper.

It reflects 80 per cent of the light, while blue-green reflects only 12 per cent.

Lincrusta Paper.

Lincrusta is a practical kind of paper. It is put on like wall paper and is about $\frac{1}{8}$ inch thick with a kind of plaster back. It comes in many patterns, such as imitation burlap, wood-paneling, etc. The surface can be painted or stained any color, which can be scrubbed down with soap and water. As it does not show grease marks, it is excellent in halls and in rooms used by the children.

To Remove Grease on Wallpaper.

Pulverize a common clay pipe, mix with water to a stiff paste, lay it on carefully and leave it on over night. Then brush off lightly.

Make a thick paste of magnesia and water and spread it over the grease spot; when dry, brush off the powder. Or cover the spot with blotting or wrapping paper and hold a warm flatiron over it.

Eucalyptus oil will remove grease, including machine oil, from any fabric without injury.

A strong solution of salt and gasoline will remove grease spots from worsted and silk goods.

Wall paper Cleaner.

Flour one quart, aqua ammonia one ounce. Add sufficient water to make a stiff dough. Knead until smooth and it is ready for use.

Cleaning Varnished Wallpaper.

Varnished paper on walls should be cleaned with a flannel dipped in weak tea and polished with a dry cloth.

To Clean Soiled Wall Paper.

Mix one quart of flour, one heaping tablespoon of salt, one tablespoon of soda, three tablespoons of ammonia (the common household kind) and one pint of rain water and steam one-half hour in a greased tin pan. Cut in pieces to handle while still hot and knead thoroughly. Keep in air-tight box or jar until ready to use.

Streaks in Painted Walls.

Take equal parts of boiled linseed oil and turpentine, dip a woolen rag in lightly and rub well into the wall. The walls will look as if they had been newly painted.

To Clean Delicate Colored Paints and Varnishes.

Moisten soft cloth with warm water, dip in whiting or fuller's earth and rub over the surface gently. This will remove the dirt and leave the paint as bright as new. Rinse with clear water and dry with soft cloth. Fuller's earth is an excellent substitute for soap.

Cleaner for Painted Walls.

Dissolve two ounces of borax in two quarts of water and add

one tablespoon ammonia. Use half this quantity to each bucket of water; do not use soap. Wash a small amount of the paint at a time and rub dry with a clean cloth rag.

Improve Green Wallpaper Faded in the Sun.

A package of green dye, over the contents of which pour one gallon of boiling water. Let it partly cool, then strain. Take a paint brush and go over the entire wall (figured and plain paper.)

For Scratched Wall Paper.

Moisten a scrap of the wall paper which has been saved, carefully scrape off the coloring with a knife and apply this to the spot. When dry the scratched place will not be noticed.

Remove Match Marks from Painted Surfaces.

Rub gently with a slice of fresh lemon, and rinse with clear water, using a soft cloth.

Wallpaper Cleaners.

Powdered French chalk sprinkled over stale bread is an excellent cleaner for wallpaper.

One heaping cup sifted flour, one tablespoon salt, one tablespoon coal oil, two tablespoons vinegar, two tablespoons ammonia, half cup warm water. Mix in small kettle. Boil until flour is well scalded and moisture is used up. Stir continually. Remove from stove and knead with hands until ready for use. Make into balls and rub walls.

Rub the soiled spots with dry plaster of paris. When all traces of dirt are removed, dust the powder off with a soft cloth.

WINDOWS.

To Clean Windows.

Wash the glass with water to which a little ammonia has been added and polish with a chamois which has been dipped in water and wrung as dry as possible, or the easiest way to clean windows is to use ammonia, not diluted. Pour from the bottle on cloth, rub windows, then rub off with clean white cloth and you will have a perfect polish and no lint to contend with.

Easy Way to Polish Windows.

Take a large piece of chamois skin and warm water; wash window, then wring chamois as dry as possible and polish window with it. You will find this handy in washing any kind of glassware.

Bon Ami and similar cleaning materials are easy to use and very effective. To keep windows free from frost rub the glass with a sponge dipped in alcohol.

Glass Windows.

To restore the color of. Rub it with diluted muriatic acid, and then clean with moistened whiting. Hot vinegar takes paint off glass.

To Wash Windows.

One tablespoon common lamp oil to one-half pail of soft, warm water; wash and polish with soft cloth; will look like new.

Take a cloth, moisten it with gasoline and go over window, then rub good with dry cloth; it makes the clearest window, takes the grease and dirt off and doesn't take much gasoline. In washing windows, old newspapers will absorb most of the dirt. Use them first.

How Double Windows Save Coal.

Experiments show that when fitted with double windows an equable temperature of 70 degrees can be maintained with the same amount of coal formerly required to maintain a temperature of 60 degrees. It is estimated that the cost of fitting the lower story of a house with double windows can be paid for in five winters by the saving in coal.

To Start an Obstinate Window.

Take each window cord in hand at the same time and pull them out until the weights are up at the top. Let go suddenly and they will drop in place with sufficient force to start the window open, when no amount of pushing will do it.

MISCELLANEOUS.**Trash.**

Never fill garret or cellar with inflammable stuff, even string or paper. Wrap such compactly in tight bundles.

To extinguish kerosene or other flames use a woolen cloth or smother with flour. A person whose clothing is on fire should be wrapped in a woolen blanket or floor rug and rolled on the floor or ground.

Burning Chimney.

Shut all doors and windows to prevent a current of air, then throw salt on the fire. A better preventive is to employ the services of a chimney sweep once every year.

The Cellar.

Large lumps of unslaked lime placed in dark damp corners in the cellar will absorb the moisture and purify the air.

A person living over a damp cellar which contains accumulations of decayed vegetables, and one who is thus breathing loaded with organic compounds, is very likely to lose, gradually, his natural vitality and to become susceptible to such germ diseases as tonsillitis, diphtheria, rheumatism and pneumonia.

Creaking Doors.

Rub a little soap, or a mixture of tallow and black-lead on the hinges.

Creaking Stairs.

Find out which one it is by stepping on every one in suc-

cession, then put a new nail through it, or, better still a screw. And save the nerves of the family.

To Stop a Squeak.

If your porch swing squeaks cut the fingers from an old leather glove and slip one over each hook before putting on the chains.

Removing Stains from Marble.

Apply with a brush a paste composed of equal parts of soft soap, quicklime and caustic potash and leave for several days. Then wash the paste off and dry and polish the marble with soft cloths, or, pound two parts of common washing soda, one part each of pumice stone and finely powdered chalk, sift them through cheesecloth, and make into a paste with water. Apply thickly, let it dry on, then wash well with soap and water, and rub it up with a soft cloth. Never use acids to marble, as they destroy the gloss.

To Put Screws in a Plastered Wall.

Enlarge the hole made by the screw and moisten the edges of the plaster thoroughly with water. Then fill the hole with plaster of paris and press the screw into it while it is still soft. When the plaster hardens the screws will be held very firmly.

A good paint for cement.

A special cement paint can be obtained at any large paint concern. This has a highly glazed oily finish which prevents the softer cements from being deroded or broken off. It is used in many factories, and can be used with equal success in the home.

To Soften Paint Brushes.

Vinegar heated to the boiling point will soften paint brushes that have become dry and hard.

To Conserve Heat.

A simple and economical device to supply a heated plant with the necessary moisture consists of two porous silica plates installed vertically inside the furnace casing.

Indirect Lighting.

The light comes from above and sheds a soft artistic light delightful for everything but close work.

Care Of Cleaning Tools.

Oil frequently the ball bearing of the vacuum cleaner to have it do good work. Empty the dust bag often or the dust will fall back on the floor.

There should be a special closet for all cleaning tools, with shelves for bottles, cleaning powders and polishes. Brooms, dusters and mops should be hung up or they will wear out

sooner. A tool will last longer if cleaned before putting away. Tools with handles do better work as you can use more strength upon them and you do not break your back.

Among your cleaning tools you should have a little oil can with a long spout, and keep castors, door hinges well oiled.

All dust rags should be kept in tight covered boxes with the other tools. Never buy a cheap tool. Good ones will do better work and last three times as long as a cheap one.

Kitchen Hints

List Of Necessary Utensils.

Tinware—Apple corer. Steamer with lid. Colander. Small gravy strainer. Large grater. Frying basket. Fine wire broiler for oysters. Heavy wire broiler for steak. Quart measuring cup. Puree sieve. 1 quart fancy mold. 1 pint fancy mold. Dozen timbale molds. Vegetable cutters assorted. Nutmeg grater. Large grater. Large and small dishpan. 4 deep jelly cake tins. Cake Box. 2 bread tins. Fine wire soup strainer.

Woodenware—Potato masher. Rolling pin. Butter paddles. Ice cream freezer. Refrigerator. Chopping tray. Scrubbing brush for table. Brush for floor. Brush for sink. Small scrubbing brush for vegetables. Whisk broom. Dish mop. Floor mop. Ice chopper. Lemon squeezer.

Agateware or Aluminum—Teakettle. 2 1-pint saucepans with lids. Soup kettle covered. 2 frying pans. Wash basin. Teapot and coffee boiler. 2 round pudding dishes. Double boiler. Salt box. 3 pie plates. Large mixing bowl. Dipper and ladle. 2 funnels.

Iron and Steelware—Griddle. 2 sets gem irons. Butcher knife. Pair of scissors. 2 iron or aluminum frying pans. Waffle iron. Set of scales. Chopping knife. Cork screw and a cleaver. Hammer; box of tacks. Can opener. Wire dish washer.

Stoneware—3 baking dishes. Custard cups. Bean pot.

Kitchen Wearables.

Wear an apron long enough to reach to bottom of dress, with bib and straps over shoulder, a pocket for handkerchief and a button on right side of waist band to hang loop of towel holder. Hang a towel thru a loop of tape and hang the tape on the apron button, the towel only for your hands.

Never wear rings or bracelets while doing washing or kitchen work as it may loosen the setting or clasps. Pin up your hair. Wash your hands well before cooking. To taste food take up a little on a fresh teaspoon each time.

The Fireless Cooker.

They save time and fuel. Go to a store and see the different kinds. With them it is possible to cook your meats, beans, cereals etc without watching and overnight if desired. It will soon pay for itself.

To Clean the Stove.

With a gas range begin with top grate and wipe its different parts with a cloth. Then use a stiff brush on the burners. Then wash drip tray with soap and warm water. Use a cloth with a little oil on it to clean space below burners. Next remove wire rack, broiling pan from oven and wash and wipe until dry. While oven is warm wipe out with oil rag and keep from rusting. A gas range should not be blackened. Oven shelves can

be scraped when needed with old blunt knife, and occasionally rub the stove with soft cloth and a few drops of turpentine. With a flannel dipped in linseed oil you can clean outside of stove instead of blacking. If fat spatters on stove wipe it off with a newspaper at once.

To polish a Stove.

A good blacking is made by mixing equal parts of kerosene and turpentine with a good purchased cake of stove polish until you have a paste. Apply when stove is warm and polish with a flannel cloth. Rubbing a rag soaked in paraffine once a week over stove will keep it free from rust. To shine the nickel trimmings rub with kerosene and whiting and polish with dry cloth. A piece of burlap makes a good cloth to polish a stove. The use of vinegar or strong tea instead of water with stove polish gives good results. To keep a stove bright wet the dauber and rub soap on it before putting on stove polish or in liquid blacking dissolve a tablespoonful of hard soap in a little water and thin the blacking.

To Remove Rust on Stove.

Use sand paper to remove spots of rust from gas stove. Pour a little oil on a cloth and wipe all rusty parts while stove is warm. To keep rust from broiler and oven rub once a week with kerosene while same are warm. To take rust from nickel rub mutton fat on it, and leave for a while then rub with tripoli and water and polish with oil and whiting.

To Clean an Oil Stove.

It will not smell if it is kept clean and wick well trimmed. Clean by boiling all parts in a strong solution of baking soda and water.

Oven Temperatures.

A slow oven is from 200 to 350 degrees.

A hot oven is from 375 to 450 degrees.

To bake bread use 375 degrees.

For rolls, 400 to 450 degrees.

For pastry, 375 degrees.

For pastry cases, 450 degrees.

For loaf cake, 300 degrees.

For layer cake, 350 degrees.

For rare beef 350 degrees first half hour then 250.

To Prevent Ovens Burning.

Cut a piece of wire door screen to fit the bottom of the oven and lay it in.

To Prevent Gas Stove Sweating.

To prevent sweating and rusting of oven leave door of range open after using.

To Clean Mica.

Rub with a soft cloth dipped into equal parts of cold water and vinegar.

A Gas Lighter.

The lighter which generates a spark by friction upon itself can be used on lamps or oil stoves and is safer than matches.

Saving Gas Bills in Cooking.

Cooking at low temperature is a gas and money saver and food thus cooked is more palatable.

Steam from stew pots is an indication of waste so lower the heat supply as the flavor of the food is going.

The best cooking heat is from 160 degrees F. to 180 degrees F. Stew pots should be opened as little as possible. If a low, even heat is maintained, opening the pot for the purpose of watching the food will not be necessary. Boiling consumes water rapidly, and each time the water supply is renewed less of the nourishing qualities remain. When cooking meats the pot should barely simmer.

The Kitchen Table.

The choice of this table is very important. A good one that will last a life time should be bought. A steel or nickeloid table top is the best for general use although expensive. The best is one with a porcelain or enameled top, but suitable only for preparing foods on and hot pots should not be set upon them. Hot pots can be set upon the steel table but avoid dropping acids on it as also on the enameled top. Of wooden tables a plain maple top without oilcloth is the best and can be kept in a sanitary condition.

The Garbage Can.

There are many kinds on the market. For a cheap can get a corrugated galvanized can. It is better to have two small ones than one large one as they are easily handled.

Garbage should be drained before putting in the can as the acid in the water eats out the bottom. Set out the can for the collector frequently. Do not keep it open as its contents soon wear it out.

The can should be cleaned once a week with ashes either from a coal stove or heated stove, as ashes contain potash. If you have no ashes, clean with boiling water with washing soda in it. After cleaning, lay it on the side so that the sun can get to the inside until dry.

Garbage and Refuse Disposal.

Garbage can be handled more sanitarly if placed first, drained, into a paper bag, which will keep the can clean. Burn all papers and inflammable matter in rubbish burner in back yard. Kerosene and chloride of lime disinfects cans, out houses and wash pipes. Towels of paper are good for hands, to drain fried foods to keep lettuce and general wiping up. Dish mops of string in two sizes, one for china and one for glass, are more sanitary than dish rags.

The Ice Box

Get a good Ice box, even if small one that is air tight and well lined, as it saves enough ice to pay for itself. A porcelain or tiled box is the best. Place it in the shady part of the back porch or if in the kitchen as far as possible from the stove, and where air can circulate around it freely.

To save ice place the block in a rather deep pan of rock salt. The salt can be used over and over again by drying the salt out doors. The salt helps to keep the ice box sanitary.

Keep the Ice box clean by washing it thoroughly once a week with lukewarm water containing washing soda. If anything spills in it wipe off at once. Milk and butter in ice box must be kept covered, as they absorb odors and dirt. Clean out waste pipe and cup at its bottom with a disinfectant once a week.

An Iceless Refrigerator.

An iceless refrigerator can be made that will keep contents at temperature of 50 degrees on a dry hot day. Make a screen case three and a half feet high, fifteen inches wide and fifteen inches deep. Have the top and bottom solid. Have a hole in bottom and set over large pan to catch drippings. Place a twelve inch shallow enameled water pan on one inch cleats nailed around side. A covering of white cotton flannel should be made to fit the frame, with smooth side out. Button the covering on the frame so door can be opened without moving covering, which can be done by putting one row of hooks on the edge of the door near the latch and another just opposite the opening with the hem on each side extended far enough to cover the crack at the edge of the door to keep out the warm outside air. This covering must be hooked around the top edge also. Two double strips of flannel one-half the width of each side should be sewed on the top of each side and allowed to extend over about two and a half inches in the pan of water.

Kitchen Floors and Walls.

The best covering for kitchen floor is an inlaid linoleum neither too light nor too dark. The best way to clean it is with a damp rag on your hands and knees. It can be washed standing up with a wet mop, but you will get the floor too wet and rot the linoleum even if careful. If you must use a mop get a cleaner mop on a handle 6 feet long. The cleaner consists of a number of rubber teeth with which a square even cloth is used. Wring the mop cloth out of water, lay cloth on the floor and grab with the teeth on the stick. Move over the surface and clean thoroughly.

To prevent linoleum from bulging, cut it $\frac{1}{2}$ inch smaller than the room and tack over it around the base board, strips of 1 inch quarter round. The quarter round should be taken up once about 3 weeks after linoleum is laid and nailed. Linoleum

can be shined by subbing it with a cloth rinsed in milk or butter-milk, rubbed dry.

Rubber roofing makes an excellent floor covering. It can be stained and varnished when laid and is very durable. To waterproof a kitchen floor, apply paraffine oil cold with a soft rag.

If you spill hot grease on the floor, pour cold water on it at once and it can be removed without staining the wood.

The best kind of kitchen walls are painted walls. Paint the lower portion up to the chair rail with good enamel paint, and the upper part with 2 or 3 coats of good ordinary paint. When soiled the walls can either be wiped off or one more coat of paint put on. Do not paper a kitchen wall as the steam from the stove will peel it off, unless the paper is well treated with a water proof finish. Painted walls are cheapest in the long run, and the lighter the better.

The Sink.

To keep an iron sink from rusting and free from grease, rub well with a soft paper or old cloth wet in kerosene.

A box of borax beside the sink will save its price in soap.

A solution of hot washing soda poured boiling hot down the sink pipe once a week will remove all grease and purify, or a tablespoonful of "cleaner pipe" in very hot water will do the same.

Always pour dish water through a sink strainer to prevent refuse going down the pipe and put refuse in garbage pail. When dish-washing is finished, wash every part of the sink with hot soapy water and once in a while with "Dutch Cleanser". Wash above and around the sink with a scrub-brush and skewer.

A mild solution of muriatic acid will bleach a stained sink board. The above cleanser can also be used.

In case the sink gets stopped up, try pouring in a lot of boiling water then use a rubber sink pump, which can be bought for a small sum and should be kept in the house, or attach a hose to the nearest hydrant, remove the sink screen insert hose and turn on the water. If these fail send for the plumber.

A Cook Book.

Cover it with oil cloth to keep it clean. Keep a shelf in the kitchen for Cook book, files, etc.

A card cabinet of recipes is efficient for you can keep adding recipes. It should have guide cards with Headings arranged alphabetically. When you need a recipe you have just a card to carry around or place before you while preparing the food.

Safety Hints.

Do not leave matches in the box, but put them in a glass jar with a screw top and then there will be no danger.

Put a match box or cup filled with sand to stick used matches in and prevent danger of fire.

When can goods are opened empty contents at once into earthen or china dish to prevent poisoning.

Uses for Old Newspapers.

Keeping house with old newspapers is an inexpensive help. Newspapers make an excellent padding for the ironing-board.

Use them on all cupboard and closet shelves.

Spread them on the floor, when sewing, or in the kitchen while baking or preparing meals. Put one on your kitchen table while cleaning fruits, vegetables, etc.; when through can burn paper and contents.

Use as a chest protector in very cold weather to prevent taking cold.

Put several thicknesses of paper over the sinkboards when washing.

Use one crumbled to wipe out greasy pans and to rub off soot from bottoms of blackened pans; also to wipe off top of stove. A crumpled paper is fine to wipe the windows before and after washing.

The Broom and Mop.

Tie strands of a new broom closely together, put into a pail of boiling water, and soak two hours. Dry thoroughly before using. Dampen in hot suds once a week. If a broom becomes dry and stubborn, freshen by soaking in cold water and drying slowly. Always hang up your broom by putting screweye in top of handle.

If floor is painted, use bristle broom set on a long handle. The best of these are mounted on wire instead of wood, and makes it very easy to pick up the finest dust. For a mop, use the long-handled string mop, bucket and mop-wringer, or a light-weight cleaner with rubber teeth, mounted on a long handle.

When making broom covers for cleaning, set a double ruffle of canton flannel, fuzzy side out, between the sides. This will not only protect the covers, but will aid in reaching hard places to clean.

Uses Of Salt.

Salt on the fingers when cleaning fowls, meat or fish will prevent slipping.

Salt thrown on a coal fire when broiling steak will prevent blazing from the dripping fat.

Salt in water is the best thing to clean matting.

Salt in the oven under baking tins will prevent their scorching on the bottom.

Salt puts out a fire in the chimney.

Salt and vinegar will remove stains from discolored teacups.

Salt and soda are excellent for bee stings and spider bites.

Salt thrown on soot which has fallen on the carpet will prevent stain.

Salt put on ink when freshly spilled on a carpet will help in removing the spot.

Salt in whitewash makes it stick.

Salt thrown on a coal fire which is low will revive it.

A teaspoonful of salt added to kerosene in a small lamp will make the light it gives more brilliant.

Salt will set the colors in wash fabrics. A cupfull to a gallon of water.

Flowers set in salted water will keep fresh longer.

Salt.

In case of nosebleed, put salt in the nose.

Salt heated in a frying pan and put in a bag is a fine substitute for a hot water bag. It is lighter and retains its heat long.

A little salt sprinkled in the frying pan before placing fish to fry will prevent it from sticking to the pan.

When boiling a cracked egg a teaspoonful of salt in the water will prevent the contents from boiling out.

To remove insects from green vegetables, wash in salt water, but do not let the vegetables soak in it.

Rub flat irons with salt before using.

Dip a piece of flannel in salt and whiting to clean knife handles and glasses.

By adding a tiny pinch of salt to milk when fresh it will keep a much longer time.

Make a little salt bag and rub the griddle with it instead of grease. Pancakes will not stick and there will be no smoke or odor.

Egg stains on silver can be removed by rubbing with a little salt and a damp cloth.

Uses of Ammonia.

A solution of ammonia cleanses sinks and drain-pipes.

Ammonia in water cleans white paint. Equal parts of ammonia and turpentine will take paint out of clothing, even if it be hard and dry. Saturate the spot as often as necessary, and wash off in soapsuds.

Ammonia in water keeps flannels soft.

Ammonia is good in washing lace and fine muslin.

Ammonia cleanses hair brushes.

Ammonia bleaches yellowed flannels.

Ammonia brightens windows and looking glasses.

Ammonia applied two or three times on a fresh cold sore will kill it. It will drive it away if used when the cold sore is first felt.

One teaspoonful of ammonia to a cup of water will clean gold or silver jewelry; a few drops poured on the underside of diamonds will clean them immediately, making them very brilliant.

Uses of Kerosene.

Use kerosene in starch to prevent sticking.

Use kerosene to remove rust from bolts and bars.

Use kerosene to remove fresh paint.

Use kerosene to clean brass and then wipe with dry whiting.

Use kerosene on a cloth to prevent flat irons from scorching.

Use kerosene to wipe spots off the tiles around a grate.

Use kerosene on stagnate water to get rid of mosquitoes.

Use kerosene mixed with finely sifted coal ashes to clean zinc.

Use kerosene on a flannel rag to wrap around a sore throat at night.

Use a tablespoon of kerosene to a pail of warm water to wash painted floors.

Use a cup of kerosene in the wash boiler to take out the dirt and bleach clothes.

Use kerosene to clean the bath-tub. Wash with hot water afterwards.

Use two tablespoons of kerosene and 1 tablespoon of ammonia in a pail of warm water to wash windows.

Use kerosene to clean gilt picture frames. Wipe carefully with a flannel cloth which has been wrung out of the oil.

Use kerosene mixed with red pepper to rid the lawn of ants. Apply in holes with long nozzled oil can, as the oil will kill the grass.

Use kerosene to paint a circle around each leg of the refrigerator to keep ants out. Also paint doorsill.

Use kerosene to take rust spot from marble, steel or iron. Make a paste of oil and wood ashes and apply to spot. Scour after few hours with a flannel rag and dry ashes.

To wash Cut glass and glasses.

Wash in cold or tepid water, with soap, cleaning with a brush and rinse in cold water. To clean decanters cut some brown paper into very small bits, cut pieces of soap very small and put in decanter. Add milk-warm water and put in a little pearlsh. Shake well and it will take off the rust of the wine, and give the glass a fine polish.

To clean Milk Pitcher.

Always rinse with or let stand in cold water before washing. Never let stand in hot water. Same with dishes covered with egg.

To clean bottles.

Cut up raw Potatoes, put in bottle, add water and let soak for a few days. Shake well, pour out and rinse with clear water or for a quick way take 1 gill of water add slowly 1 tablespoon sulphuric acid and allow to stand a short time. Then rinse.

The Dishrag.

For a dish rag sew two little salt bags together or use a string mop. In knitting dishrags put in several rows of hard twisted cord so as to clean surface on which scouring soap or metal is not used.

The Wiping Cloth.

It must always be cleaned and steril. Old flour sacks make good ones as do old heavy sheets and old table cloths hemmed. New ones must be boiled before using.

Dish Pan and Drainer.

A wooden dish pan saves dishes chipping. Metal pan is best when made of Aluminum. A wire basket makes a good drainer to set dishes in to dry.

Stacking Soiled Dishes.

First scrape dishes with spatula or rubber scraper and stack in pan of water. Then cover them with towel.

Soap Shacker.

Use soap in a small wire shacker. Never leave soap lying in dish water. Use plenty of hot water.

To Wash China.

If your family is large and you can afford it, buy a mechanical dish-washer. Some are run by hand and some by electricity. Go to a store and look over all kinds carefully. When you buy, buy on trial only. If the store-keeper believes his dish-washer to be a good one, he will sell it on 10 days trial. In using dish-washer, scrape dishes thoroughly with a wooden scraper. Use plenty of hot soapy water. After washing, place the dishes in the wire drainer and rinse with hot water and they will not need drying. Glasses and silverware however, must be dried with a towel.

The quickest way to lean dishes for washing is to place a fine meshed sieve under the hot water faucet and rinse off every thing into it. Never alternate cold and hot water on china if you don't want it to break. Washing soda should not be used on china as it will take off the gilt.

Paper Dishes for Luncheon.

Use paper dishes for luncheon and save washing. Use those with paraffine lining as it prevents food soaking into the plate.

Caseroles.

These can be used to cook and serve food both to save dishes.

To clean Metal Utensils.

Always wash articles carefully before cleaning. After cleaning, wash in hot water containing ammonia, and dry carefully.

Tin. Sapolio or silver polish, whiting moistened with ammonia, alcohol or water.

Steel knives. Brick or sapolio.

Silver. Silver polish or whiting, moistened with ammonia, alcohol, or water.

Copper. Vinegar and salt, then ammonia, or lemon for vinegar.

Brass. Vinegar and salt, then ammonia.

Zinc. Whiting moistened with vinegar or powdered pumice.

Iron. Rub with oil, then scour with ashes or pumice stone.

Nickel. Silver polish or whiting moistened with ammonia, alcohol, or water.

Aluminum. Wet a cloth in kerosene and rub stains, then wash off thoroughly with soap and water.

Clean with a paste of whiting, then wash and dry.

Lemon juice on a cloth and rubbed on dark places will remove stains.

Boil in clear water, to which a spoonful of vinegar has been added.

Don't use washing powders or brown soap as they mostly contain alkali. White soap and water are the best. Polish with silver polish once a week.

Steel Wool and a neutral soap are good to clean with.

To Clean Zinc.

Use soap and wood ashes for zinc tubs and pails, or soapsuds and salt, and then polish with kerosene.

To Clean Stained Chafing Dish.

Moisten a soft cloth with ammonia to take off stains left by the fumes of the alcohol lamp.

To clean Teakettle.

Rub it with kerosene and polish with a dry flannel cloth.

To clean Pie Tins.

Put tins and other cooking utensils in the wash boiler and place on the fire with plenty of water and a liberal amount of washing soda. Boil for twenty minutes, remove the boiler from the fire, but do not take the tins out for three hours.

To clean Beanpots.

Fill with cold water, add a large tablespoonful of soda, or a little ashes, set in the oven and leave half a day.

To clean Nickel Coffee Pot.

Scald it out with hot soapy water, to which is added one teaspoon baking soda, rinse and let air thoroughly.

To clean Granite Or Agate Coffee Or Tea Pots.

Nearly fill with cold water, add one tablespoon borax, heat gradually until water reaches the boiling-point. Rinse with hot water, wipe, and keep on back of range until perfectly dry.

To Clean Graniteware.

Where mixtures have been cooked or burned on, half fill with cold water, add washing soda, heat water gradually to boiling point, then empty, when dish may be easily washed. Any soap powder may be used in place of washing soda. A piece of pumice stone is also good.

To Clean Enameled Ware.

Use powdered pumice stone.

To clean Pans.

Pans that have scorched food adhering to them, sprinkle dry baking soda in them and let them stand for a while.

To Scour. Use coarse sandpaper in place of sandsoap to scour kettles with.

To clean Cultery.

Use Potato water applied with a soft cloth. Polish with a chamois leather. When badly tarnished, wet a soft cloth in sweet oil and then with a cleaning powder rub untill the dark places have disappeared. Then rub with powder and dry chamois and polish with a soft brush.

Egg Stains. Use salt and liquid ammonia.

Cutlery not in daily use should be well polished and buried in a box of sawdust.

Save the labor of constant cleaning by plating steel knives.

To clean Sieve.

Ammonia will clean it with the aid of a brush.

To clean Jars and Jugs.

Rinse them with lime water. This is particularly good for vessels used for milk, as there is no likelihood of their not being properly cleaned.

To clean Food Chopper.

Run a piece of pulverized sand soap through the chopper as you would a potato.

Comfort Hints.

Drink sweet milk after eating onions; it will purify the breath, and hot coffee after garlic.

To sugar doughnuts easily, put a few at a time in a paper bag containing sugar and shake till well covered.

To brown potatoes while frying, sprinkle them with a little flour before frying.

Sifting a little flour over cakes before icing, will keep the icing from running off.

To shell pecans and walnuts easily, pour hot salt water over them and let them stand awhile.

Pare and cut onions under water to avoid disagreeable effects.

To avoid stained hands in paring potatoes, boil until tender with the skins on, then pare and dress with cream dressing or any way you prefer.

If your dish mop won't stay tied, wax the string next time and note the result.

Keep a teaspoon in your salt jar; also a measuring cup with your flour.

Get an ordinary "Office stool," cut to height for sitting down to work. And you can do most of your kitchen work sitting down. Put chair under kitchen table or sink when not in use.

An electric fan placed on a little shelf in front of the vent will blow all odors away from the worker.

Economy Hints.

Don't turn on more burners in an oven than needed.

Grease will blunt knives, so never leave them standing in it.

To grease pans well and quickly use a varnish brush.

To freshen bread or rolls dip quickly in cold water, put in pan and bake until heated through and crusted again. Then wrap in slightly dampened cloth and allow to cool.

When vegetables or other foods become scorched remove the kettle at once from the stove and put it into a pan of cold water. In a short time the odor will hardly be noticed.

Ice cream can be kept hard for 24 hours if placed in a paper cooking bag and the ends of the bag being folded over tightly to keep out the air, is put in the refrigerator directly on the ice.

To keep lemons put in jar and cover with cold water, placing saucedish over them to keep them under water. Cranberries may be kept in the same way. Change water twice a week.

To keep cheese fresh wrap in cloth wet in vinegar. Keep cool.

Teacups with broken handles are very useful for poaching eggs. Butter the inside, break egg into the cup and stand the cup in the frying pan half filled with water.

To make oilcloth wear longer, rub with a mixture of beeswax and turpentine.

Make paper funnels out of pieces of wrappingpaper and use them for pouring sugar, tea, coffee, etc., into their proper receptacles.

To open can of baking powder, roll can under the foot a minute.

Don't throw away your old baking powder cans. Use them to steam puddings or brown bread.

Yolks of eggs will keep if dropped whole into cold water.

The remains of a cake of compressed yeast keeps in cup of cold water.

Don't let the kettle boil over on a large burner. Bring to a boil and move to simmering burner.

Turn off both oven burners 3 minutes before taking bread out. The heat in the oven will finish the baking.

If gas bills seem too high, or you think gas is escaping by sense of smell, take a reading of the meter when no burners are in use, and after an hour repeat the reading.

MISCELLANEOUS KITCHEN HINTS.**To Mend Enamel Ware.**

Take equal parts of soft putty, finely sifted coal ashes and sifted table salt, mix and pack into the holes. Keep a little water in the dish until the cement hardens.

Cork.

When the corks slip into salt and pepper shakers a small piece of court plaster will serve the purpose and can be washed off easily when the shakers need refilling.

Wire Rings.

When a wire ring wears off the end of the handle of a dipper or cover of a kitchen utensil, run a bit of wire through the little groove of tin, and twist the ends over and over so they will be fastened securely and will not catch or tear your hands.

Twine In The Kitchen.

Buy a small tin funnel for five cents, file a notch in the bottom and turn the edge up, filing that. Put the ball of twine in the funnel, letting the end hang through the bottom. A jerk across the upturned edge of tin will serve as a cutter and save fingers.

Screw Eyes.

A handful of assorted sizes are valuable. Screw one into the end of all things having wooden handles and hang them up. Also into your bread board, ironing board, etc. When the wooden handle comes out of your sacepan lid, a screw eye screwed into a cork in the inside makes a good substitute. Put one at each end of your kitchen wall, on ironing day stretch a stout cord between and see how convenient for airing the clothes.

White Oilcloth.

Tack white oilcloth on cupboard shelves where you keep your grocery supply. Make a thick paste of flour and boiling water, spread over the back of a piece of oilcloth cut large enough to cover the top and reach under the edges of the kitchen table. Paste this on and see how much less work there will be in keeping the table clean.

To Prevent Dampness.

Place a small wooden box filled with lime in the storeroom as it absorbs all dampness and keeps the air dry and sweet.

Padded Holders.

Make simple padded holders, hang them by the stove and use on the handles of hot utensils.

An air Tight Stove.

There should be one in every home not only to warm one quickly but to burn up the burnable household trash. Put a brick in one so when fire dies out the brick will throw out more heat.

To Keep Ice.

Put in a bag of woolen cloth, with double sides, between which a layer, two inches thick, of feathers has been quilted.

Steel Knives.

Don't use steel knives for cutting fish, oysters, sweetbreads or brains. The steel blackens and gives an unpleasant flavor to food. To remove rust plunge the blade into onions and let remain for 3 hours.

To Make Oil Lamps Brighter.

Add a small lump of camphor or a few drops of vinegar to the oil to make lamps give a better light.

Cheap Solder.

A cheap solder can be made of common alum melted in an iron spoon over hot coals. This cement is good to join glass or metals and will not penetrate through.

Greasy Pans and Plates.

Clean with old newspaper before washing.

To Prevent Crust in Tea Kettle.

An oyster shell placed in kettle will attract stone particles in water and prevent their forming on the kettle.

The Tray.

To economize time and strength, the housewife should take a tray on her first trip to the cupboard as she starts to prepare a meal. Place everything on it needed for cooking, thus saving trips. Use the tray in setting and clearing the table. Her work will be lighter.

Kitchen Knives.

Contact with other articles dulls them, so do not put them in a drawer, but hang them in strips of leather or chamois.

To Clean Brushes.

Dip the bristles in warm water to which has been added a few drops of ammonia. Finish by dabbing bristles in clear cold water, and hang in air to dry.

Care Of Iron Utensils.

When new, they should be covered with fresh mutton tallow or some other good grease and allowed to stand several days. Then heat, pour off the grease and wash with hot water or hot water and soda.

Kitchen Closet.

Some form of closet devoted to keeping brooms, buckets and cleaning utensils is a great convenience. Place a row of right-angled cuphooks at intervals of 4 inches into a wooded strip about 6 feet from the floor. Then insert a screw-eye into the handles of all brooms so they can be hung on the hooks. The closet should be about a foot wide for scrub buckets, cleaning fluids, etc., and have a shelf for bottles of polish and cleaning preparations.

To Train Help.

The reason that house-keepers have to put up with incompetent and inefficient help is because they do not know how to train the help themselves. Girls who resent being told things over and over should be handed a list of different directions. They will learn them little by little by heart and will take a pride in living up to the rules.

Flour Sifter As Help In Kitchen.

Use a flour sifter instead of a sieve to strain potatoes, to strain apple sauce and to strain potato soup.

Glass Baking Dishes.

Glass baking dishes are practical and are made of especially heavy, clear glass, which resists high temperatures. Use for all scallops or baking dishes in the oven as they permit the serving and cooking of food in the same dish. They are easier to wash. They cost quite a bit, but would be an addition to any pantry.

Good Scrub Rags.

Take pieces of old winter underwear, lay together flat, and stitch back and forth on the machine. Discarded stockings are good.

Good Mop.

Take a light wood handle about ten inches long, an inch in diameter at bottom and smaller at the top. Cut unbleached muslin or other suitable cloth in four circular pieces ten inches across. Cut a circular hole in the middle of the cloth large enough to go over the top of the handle and not large enough to slip off at the bottom. Get a small ring from the hardware store just large enough to slip over the cloth and hold it tight on the handle. Clean by removing from handle, wash and dry in the sun.

Ironing-Board Covers.

It is cheapest to buy new heavy unbleached muslin, and use old sheets as padding.

Curtains.

Get unbleached muslin or fine cheesecloth, make a deep hem and stencil some attractive pattern on them. Ordinary fishnet, double width can be used as it needs no ironing.

Wire Baskets In The Pantry.

Wire baskets such as business men use for holding unfilled letters make convenient receptacles for vegetables. A round one is indispensable in the kitchen as you can wash lettuce and drain without pressure or touching it or vegetables in it which saves breaking them when removing from the kettle.

Egg Beater.

A drop of olive oil put on the pivot at the centre of the large wheel and the cogs of the wheels oiled occasionally will make it last longer.

Rolling Out Pastry.

A marble slab is better than a board for rolling out pastry. Always roll from you instead of toward you.

Cooking Utensils.

For frying, iron or steel. For cooking fruits and acid foods like tomatoes, rhubarb, etc., agate is best. But Aluminum is lightest and wears the longest and is the best.

To Open A Sardine Can.

Start the key in the ordinary way and, after giving it a few turns insert the point of the ice pick in the key loop.

To Remove Top Of Milk Jar.

Use nut pick and there will be no more bent forks.

To Remove Cover Of Fruit Jar.

Place Fruit-jar upside down in an inch of hot water, for a few seconds.

To Remove Cake Or Muffins From Pan.

Use the spatula. Also use it to clean out a cake bowl, or scrape a cake tin, or clean off the meat or bread board.

To Take Hot Pans From The Oven.

Cut the thin end of a shingle to six inches wide. Make a handle of the other end and hang it back of the stove where it will be handy. There are patent lifters for sale that are invaluable.

Egg Beater.

A clamped device egg beater is better than that which must be held in the hand and saves energy.

Parer.

A metal scoop with a slot in it, mounted on a short, stubby handle can be bought. Move quickly lengthwise over the potato or vegetable when the skin will be pared off by the sharp edge of the slot.

To Peel Tomatoes. Peaches Etc.

Put them into a frying basket and plunge them into hot water for three or four minutes.

Pour boiling water on Oranges and let them stand five minutes. The white lining will come clean with the skin.

Cherry Seeder.

An ordinary hairpin, by using the closed end inserted in the cherry at the stem and can be used rapidly and leaves the fruit whole.

Nutmeg Grater.

Buy a small perforated wheel mounted on a handle. The nutmeg is placed in a small depression and as the wheel revolves it grates the nutmeg.

Corks Acid Proof.

Soak them in hot paraffine and they will resist powerful acids.

A Home-Made Water Filter.

Tie a thick square of absorbent cotton over the mouth of the faucet. This should be renewed daily.

Laundry Hints

The Apron.

Purchase white oilcloth, about two yards; cut out arm holes, bind, making straps over shoulders attached to arm holes with one button, and button hole at top; have two strips to tie in below the waistline. It is waterproof and when soiled wash with damp cloth. Rubber aprons can be purchased at any dry goods store.

Washing Without Rubbing.

Sort your clothes, soak cleanest in luke warm suds for ten minutes. While waiting fill the boiler two-thirds full of water.

Slice a half bar of good white soap (white suds will make white clothes) and add a lump of paraffine about size of walnut.

Put both together in a quart of water and cook until dissolved.

When water in boiler is to the boiling point, put in soap and paraffine and then the clothes.

Boil about twenty minutes rinse in two waters and one blue.

You need not rub clothes, as dirt is all boiled out.

The flat pieces can be put through the wringer by folding through the center and hung up, that way they do not need ironing as they are very smooth and very white.

Before washing, all clothes should be wet thoroughly with cold water, and should be "set to boil" in cold water.

In removing clothes from line, much trouble will be saved if they are pulled into shape and folded smoothly. Especially is this true of table linen and bed linen.

Whitening Clothes.

If pipe clay is dissolved in the water the white clothes will be clean and white with half the labor and fully one-half saving of soap. Pipe clay softens the hardest water. (A penny's worth to four gallons of water.)

Whiten clothes by cutting a lemon in slices (without rind) letting it remain in boiler until the clothes are ready to come out.

Turpentine is one of the most useful of washing aids. It will loosen dirt without the slightest injury to fabrics. Dissolve two pounds of soap in three gallons of water, adding a tablespoonful of turpentine and three tablespoonfuls of household ammonia. Soak the clothes in this for two or three hours before washing. Clothes treated in this way will not need boiling. Put in the water when one first rises, when breakfast is over they will be ready.

A good washing fluid for very soiled clothes is made with

equal quantities of turpentine, kerosene and lime water mixed. Wet the garments with the mixture and after letting them stand in water enough to cover them wash with warm suds.

All soaps are better if they are shaved and dissolved in the water. Soap jelly is made by shaving a bar and letting it simmer in boiling water till it becomes thick like jelly. A teaspoonful of borax will soften it.

To whiten clothes and keep them so, add a spoonful of borax to the rinsing water. Dissolve the borax in very hot water before adding to the rinsing water. Clothes dried slowly are whiter.

Whiten yellow linen by dipping in soap-suds and spreading on grass for 2 or 3 days, then rinse, or put a slice of lemon or 1 tablespoonful of household ammonia in the water when you boil them.

Oxalic acid is good for yellowed linen. Add 1 gill of acid to 2 gallons of freshly boiled water. Be careful, as it is poisonous, in case of scratched hands.

To Set And Renew Colors.

To set colors such as green, blue, lavender, red, purple and pink, soak in alum water, 2 ounces to a tub. Black, gray and dark blue in strong salt water, 2 cups of salt to a gallon of water but increase the quantity if the water shows a trace of color. Salt is better for setting browns, blacks and pinks, vinegar for blues, $\frac{1}{2}$ cup to 1 gallon of water.

For lavender gingham, sugar of lead, 1 tablespoon to gallon of water. Soak over night. Rinse out salt before washing.

Colored clothes must not be soaked or washed in very hot water. Use mild, pure soaps, free from alkalis. Do not rub soap on clothes.

Shave a bar of white soap in 2 quarts of soft water. Heat until soap is dissolved. Put in the water enough solution to make good suds.

Do not use soda, ammonia or other strong cleaning mixture in washing colored cotton materials. The strong alkali will remove dirt, but also the color, Ammonia may restore color faded by acids.

Color that runs from one fabric into another can be removed by soaking in plenty of water for 12 hours and dry in the sun.

Faded wash dresses may be made white by dissolving $\frac{1}{2}$ pound cream of tartar in 2 gallons of warm water and soak dress 24 hours. Wash and boil in the usual manner. Faded Pink Calico can be redyed with water in which a small piece of turkey red cheese cloth has been boiled or use red ink.

Wash colored clothes quickly, one piece at a time. Do not "blue" pinks, yellows, greens or lavenders.

Starch cotton fabrics with boiled starch before drying and dry quickly in shady, breezy place.

Sprinkle clothes just a short time before ironing. Iron on the wrong side, seeing that iron is not too hot.

Salt Water For Handkerchiefs.

Colored handkerchiefs should be soaked in cold salt water a short time before washing to prevent colors running or fading.

To Prevent Mauve Fading.

Add a little soda to the water in which Mauve is washed to keep the color from running.

Borax For Colored Linens.

Use plenty of pure pulverized borax in water used to wash and rinse delicate shaded colored linens.

Rinsing Colored Blouses.

Add 1 ounce of Epson salts to a gallon of water to rinse colored blouses or wash dresses.

To Set Colors In Stockings.

Wash first in salt and water for black or brown stockings to set color.

Miscellaneous Washing Hints.

Don't set clothes to soak in warm water and leave them until the water becomes cold. The fibres will expand in the warm water and then contract in the cold water entangling the dirt.

Rain water is the ideal water for all washing purposes.

Hard water for rinsing clothes should be softened with borax or ammonia.

In case of using kerosene oil in washing, buy only the pure oil. Dissolve half a cake of mild soap, shredded, in a pint of water over the fire; add two tablespoons of kerosene oil and stir into ten gallons of water; add the clothes dry, and stir while boiling hard about twenty minutes; rinse in at least two waters.

When washing with kerosene use rain water or water soft naturally, (not by addition of borax etc.,) to avoid the greasy scum formed by the combination of the oil and minerals in the water, which settles on the clothes. Be careful in using Kerosene.

Easy washing.

Half fill boiler with water, cut half bar soap, add a little washing powder, boil, add one-third cup coal oil, boil one minute, put in finest clothes first (dry). Do not pack boiler too full, boil 20 minutes, have a pot of boiling water to which remainder of soap has been added. Pour this into boiler as the dry clothes absorb the water, repeat till all are boiled, add two tablespoons of coal oil to third boiler, rinse well, no rubbing is required.

To Wash Handkerchiefs.

Place them in a pail of cold water, cut one fourth of bar of laundry soap into pail, and let come slowly to a boil. Boil 15

minutes rinse and blue: a Clean and sanitary way and no handling.

To Prevent Fading.

Into a pail of hot water put two tablespoons turpentine and a handful of salt. Put in garment and let remain till water is cold.

To Wash White Corduroy.

Wash in warm, soapy water until clean, using a good quality soap, then boil one-half hour in soapy water. Rinse in clean water, changing the water three times, and rinsing again in cold bluing-water. Don't wring or squeeze, but hang to drip dry. Don't iron.

To Shrink Fabrics.

Soak well in water, allowing them to stand until every thread is saturated, and hang them on the line when dripping wet. When dry sprinkle and iron in the usual way, or press before quite dry.

To Wash a Rug.

Stretch the rug and tack it upon a clean floor. After scouring it well with soapsuds, rinse thoroughly to remove all traces of the animal matter in the soap. Let the rug stay tacked down until perfectly dry, so that it will not shrink.

Washing Bedspreads.

Do not put a bedspread through the wringer after the last rinsing water, but hang it on the line dripping wet. It will dry without a crease, will not require ironing, and the fringe will be like new.

Washing Delicate Materials.

To wash sheer white waists, infant's dresses, Battenburg centerpieces, even lace curtains, place in a pillow-case (one piece in each case) and tie a cord around the mouth of the case; wash in the washing machine with the weekly washing. It need not be removed until the article is ready to be rinsed and blued. Articles thus washed last longer, and are not torn in the process.

Blueing.

To prevent bluing from spotting, tie cloth over mouth of bottle and let it strain through cloth into the tub. You will have no more spotted or streaked clothing.

A Dryer.

There is a special dryer made which can be installed in the kitchen of the small apartment. By means of a pulley it is raised to the ceiling, out of the way when not in use, and it can be raised high or low at will. Quite a number of clothes can be dried indoors in this way. It costs \$5.

Making Muslins Nearly Waterproof.

Muslins and laces may be rendered much less inflammable

by simply mixing with the starch used in laundering an equal quantity of whiting.

To Save Soap.

Make a six inch white bag and put all scraps of soap in it and keep in wash boiler. Soap needs warmth, dryness and light and improves with age.

Washing Kitchen Towels.

To wash quickly and easily put them on to boil in cold water in which are dissolved some soft soap and soda. Boil for about 20 minutes or until ready to wash out. The towels will require very little rubbing.

Washing Silks.

Wash crepe de chine in cold water with a good soap. After the last rinse, wring gently, spread on Turkish towels, roll loosely and put away until dry, and it will retain its natural color.

To keep crepe de chine waists white, wash in tepid soapy water, then rinse well in clean tepid water and roll in a Turkish towel to stand. This absorbs the moisture quickly but leaves sufficient dampness for easy ironing. Iron waist on wrong side on Trukish towel.

Wash georgette crepe in cold water, which prevents shrinking.

White crepe de chine may be colored to suit taste by soaking crepe paper in water, using liquid as a dye.

Wash sponge in a warm suds of white soap and hang in the sun until bone dry. Iron on wrong side without sprinkling.

The best way to cleanse white silk is to wash gently in warm water and white soap suds. Do not wring, but press out water gently.

WASHING CURTAINS.

To Dry clean Lace Curtains.

Pin a sheet on the carpet. Then over the sheet scatter Indian meal and borax mixed in the proportion of a cup of meal to a teaspoon borax (powdered). Over the sheet pin a curtain and over the curtain scatter the meal and borax mixture. Lay another curtain over this, then more meal and borax mixture till all the curtains are pinned down and all strewn with the meal and borax.

Now pull out the pins and roll up in a compact roll, so that the sheet shall cover all. Lay this roll away, for a couple of weeks then shake out your eurtains, and PRESTO! they are like new. Not a drop of water but they are pure as new snow.

Making White Curtains Ecrú.

Soak the curtains over night in cold water to remove all dust. In the morning wash in the usual way and rinse

thoroughly to remove all the soap. Then put in boiler with a tan stocking. Remove when right color is reached.

Another way—Dissolve one cake of white soap in two quarts of water and add one tablespoon of borax and use tepid. Rinse without blueing. Put one teaspoonful of black tea to one quart of water in boiler. Coffee can be used instead of tea.

To laundry Net Curtains.

When fish net or heavy net curtains are washed hang them up while wet on the rods at window. They will come out better than if ironed.

To Stretch Curtains.

Baste a broad hem at the top and bottom and run a strong unpainted curtain pole just the right length through each hem. Hang up and sprinkle well and let dry. They will be smooth and you can iron with a warm iron; or pin on sheets upon the floor or fasten to stretchers.

WASHING WOOLENS.

General Advice.

Before washing, woolen things should be well brushed and shaken to get rid of the dust. Rain, or soft river water, should have a strong lather made in it of soap; or, if the things are very greasy, ox-gall should be added, in proportion of half a pint to 6 quarts of water; then boiling water should be added to the lather to make it as hot as it is possible to bear the hand in and the dirty woolen should be put in and dipped and raised repeatedly for several minutes. It should then be squeezed (not wrung) as dry as possible from the dirty, suds, rinse in a hot water, squeeze as dry as possible and dry in the open air.

To Prevent Woolen Garments from Shrinking.

It is important to keep the material well stretched to keep the fiber from becoming matted. A washboard should not be used nor should soap be rubbed on the garment. Water, both for rinsing and washing, should be warm, and the soap should be dissolved in it before the immersing takes place.

To Prevent Blankets Shrinking.

After washing woolen blankets dry them on curtain stretchers to prevent them from shrinking.

A Washing Hint.

When washing wool dress goods, trousers or anything of that sort, add to the last rinsing water, a handful of common glue, dissolved as for gluing furniture; it will restore the body, and newness. Take white glue in same manner and add a little to starch when laundering lace curtains, thin white, or colored lawns.

To clean Sweaters.

After washing the sweater squeeze instead of wringing. Put a heavy laundry paper in the bottom of a large baking pan and place the sweater in pan, put into the oven and turn gas very low, leaving door open, turning occasionally. The sweater will be soft and will not shrink and will not stretch. Watch it carefully.

To Wash Stockings.

Black stockings should be rinsed in blue water to make them a good color.

STAINS.**Javelle Water.**

4 lbs. washing soda.

4 quarts. boiling water.

1 lb. chloride of lime.

Dissolve soda in water in agate or graniteware kettle, boil ten minutes, stir in lime gradually. When cold, strain through cloth and place in bottles. For ordinary bleaching use 1c to 8 qts. of water. Do not leave in water over 5 minutes.

General Hints.

Peroxide of Hydrogen bleaches many stains.

Don't rub soap directly on a stain in cotton goods. First wet the cloth and partly wash it out in clear water.

Acid Stains.

Chlorform removes acid stains.

Colors removed by acids can be often restored by ammonia. Be careful to touch only the spots.

Coffee And Tea Stains.

Remove tea and coffee stains with boiling water by pouring water through the fabric.

Mix the yolk of an egg with a little water slightly warm, and use like soap. If stains have been in long, add a little alcohol to egg and water.

Soak hot tea or coffee stains in cold water, wring, spread out and pour a few drops of glycerine on each spot. Let stand several hours, then wash with cold water and soap. Stains of long standing can be removed in this way.

Rub butter on tea or coffee stains, afterward washing the garment in ordinary hot soapsuds. This removes fruit stains also; in fact almost any stain, except ink.

Chocolate Stains.

Soak in kerosene and wash in cold water, or borax, moistened slightly and left on the spots several hours will remove. Sprinkle the stain with powdered borax, soak in cold water, then pour boiling water over the stain.

Blood Stains.

Use coal oil. Repeat and wash out or soak in cold or tepid water, wash in this water and then in warm soapy water and boil; or lay a thick coating of wet starch over the place. An application of a weak solution of soda or potash, and the subsequent application of the solution of alum is good.

Calla Lily Stains.

Try ammonia several times, or alcohol. Nothing is very satisfactory.

Egg Stains.

Soak in cold water—never in hot, which would make them impossible to remove.

Fruit Stains.

Dip in Javelle water and rinse thoroughly or treat like tea stains.

Soak fresh stains in milk (preferably hot) or use oxalic acid.

Place soiled portion over saucer or bowl, pour boiling water through stain pouring from a height. Repeat until it disappears.

Smear glycerine over stains in linen and leave for an hour. Wash in warm soapy water.

Remove peach stains by soaking in boiling water before washing. Do not touch with soap until after they have soaked.

Wash blueberry stains at once with cold water and white soap.

Grass Stains.

Use alcohol or remove with ammonia and water.

Wet stain in kerosene then wash in very hot soapy water.

Rub lard on stains, then cold soapsuds, then rinse.

Use lump Fuller's earth wet and placed on stain. Let stay 2 hours, then rub lightly. Apply again if necessary and brush off when dry.

Rub molasses on white goods and leave until laundered.

Iron Stains.

Spread carefully over bowl in which you have placed $\frac{1}{2}$ teaspoon borax and 1 pint of water. Drop by drop apply acid until the stain brightens; then dip directly in water. Repeat if necessary. It is often good to add ammonia to rinsing water.

Apply lemon juice, then cover thickly with salt, and let stand several hours.

Hot solution of oxalic acid, or a solution of muriatic acid.

Moisten spots in soft water, rub cream of tartar and then salt on both sides and dry in sun.

Moisten with ammonia, then use salts of lemon or oxalic acid, rinse in boiling water.

Soak stains in rhubarb juice brought to boiling point, then rinse in cold water.

Soak in cold water $\frac{1}{2}$ hour and cover thickly with ordinary laundry soap.

Hold spot over spout of steaming kettle, and when the spot is thoroughly saturated drop lemon juice on stain.

Ink Stains.

Try lemon juice or salts of lemon.

Use boiled rice instead of soap in washing and rinse in cold water.

Wash garment in a solution of hydrochloric acid and rinse in ammonia water.

Before wetting the article make a paste of flour and water and spread on stains. Leave on 1 hour. Then wash.

If put to soak in sour milk as soon as possible after staining, the fabric will not be injured. Wash in warm water and soap, and if a dark stain remains, rinse in a weak solution of chloride of lime.

Pour a tablespoonful of kerosene on stains and rub well. Rinse in kerosene and then wash.

Grease, Oil And Wax Stains.

Rainwater and soap will remove machine grease from washable fabrics, or use either chloroform or naphtha. Both of these must be used away from either fire or artificial light.

When sewing machine oil spots material, rub the stain with lard and let stand a few hours; then wash with cold water and soap.

Put a blotter over grease spots and press with hot iron.

To remove automobile or dark heavy grease for washable fabric, rub well with small piece of butter, then wash and rinse.

Remove tar with kerosene, then warm water and soap.

Pitch, wheel grease or tar stains can be removed by softening stains with lard, then soak in turpentine. Scrape off with knife and sponge clean with turpentine rubbing gently until dry.

Wax or tallow stains respond to laying piece of brown paper or clean blotting paper on them and iron with hot iron.

Milk Stains.

Remove milk and cream with cold water.

Mix together one part of turpentine to two parts of essence of lemon. Apply with a soft cloth and rub gently until the stain disappears.

Mildew.

Sprinkle thickly with salt, squeeze lemon juice over and spread out in sun.

Soak in a weak solution of chloride of lime several hours. Rinse in cold water.

Boil in buttermilk. This will also bleach material that has turned yellow from lack of use. Rinse in warm water and hang in sun.

Perspiration Stains.

Use clear ammonia on silk or apply a mixture consisting of three parts of alcohol, three parts of ether and one of ammonia.

Medicine Stains.

Remove by soaking alcohol or strong ammonia water is excellent for iodine stains.

Mud Stain.

Soak in kerosene.

Stain From Marking Linen.

Whenever linen is marked the wrong place with marking ink, the following method is very good. Place the article immediately in cold water to which add a little lemon juice. Let soak 15 minutes, then soap stained part and rinse.

Paint And Varnish Stains.

Use alcohol or try benzine or chloroform or remove paint with turpentine and ammonia.

Stains On Table Linen.

Dissolve one teaspoonful of oxalic acid in a bowl, add 1 pint boiling water and dip in the stained parts. Rinse carefully.

Soot Stains.

Rub repeatedly with clean portions of starch, flour, or corn-meal.

Vaseline Stains.

Remove with ether or soak in wood alcohol and rub with hands. Then wash in hot soap-suds. Keep both from fire.

Wine Stains.

Remove by sprinkling salt on them and then pouring boiling water through them, or put dry salt on fresh stains; warm milk on old ones.

THE WRINGER.

To hold wringer firmly to galvanized tub place an old mason jar cover under each thumbscrew. This holds wringer more firmly.

Loosen wringer rolls, dry thoroughly and wipe with cloth moistened with kerosene. This is a splendid stain and dirt remover. Cover wringer with a cloth after each washing and see how clean it will keep.

When roller cracks wrap it with a cloth, then wrap several times with wrapping twine and it will do till you can get a new one.

Do not put table linen thru wringer as it makes creases that will not come out even if the cloth is ironed when very damp.

Clothes that you wish to look nice when ironed, should be wrung by hand.

Turn a wringer steadily and evenly never allowing the clothes to bunch as that strains it badly. Loosen and oil it when you have finished.

If the wringer works hard, put a little kerosene on the cogs and work them, then wipe and put machine oil on and work them.

STARCHING.

It is a good plan, when making starch, to shave fine pieces of soap and add to starch. This gives a glossy finish and prevents irons sticking. A little borax in boiled starch adds gloss to clothes.

When starching holland pinafores put a little strong tea into the starch to keep garments a good color.

Beat lumpy starch with an egg-beater. It is quicker than straining.

In washing blue or colored goods, make your starch water as blue as the goods, and starch will not show.

Boiled starch is made smooth by the introduction of sperm, salt or gum arabic dissolved.

THE CLOTHES LINE.

Hanging Out Washing.

Hang your clothespin bag or basket on the line ahead of you by means of a strong wire shaped like the letter S, slipping one end of wire over line and hanging basket on other end.

The Right Way to Hang Skirts.

Pin skirts made of pique, cotton or woolen to the line by the waistband, so they will hang straight down. If pinned at the top they shrink evenly all around instead of sagging, as they do when pinned by the hem.

One-Piece Dresses.

One-piece dresses lose their shape when hung on the clothes-line. Slip them over a coat-hanger. They dry well and hang as evenly.

Barrel Hoops for Clothes Hangers.

Piece of barrel hoops from ten to eighteen inches long are very useful to hang ironed shirtwaists and little dresses on. Put one end in the armhole. This keeps them in shape while drying, and several can be hung on a few inches of line.

Hanging up Stockings.

Hang your hose by the top and save the toes, and they will dry in better shape.

The Clothes Basket.

Have your clothes basket cleated on the bottom. It will

withstand hard knocks and will lengthen its term of service twofold.

Clothes Pins.

Drop wooden clothespins into boiling water before using them.

Clothes Line Apron.

Make a clothespin apron of strong ticking, turn up at the bottom to form two wide pockets.

Sprinkling Clothes on the Line.

Turn the nozzle of the garden hose to a fine spray and sprinkle the clothes while they are on the line—a very quick and good method. All plain pieces may then be rolled and laid in the basket as they are taken down. Starched articles may need further hand sprinkling, or sprinkle clothes with large atomizer such as gardeners use, or a small watering pot with a fine spray.

IRONING HINTS.

Two Ironing Boards In One.

Pad ironing boards on both sides. Iron the colored things on one side and the white on the other. Tack padding to the board on the edges.

The Folding Ironing Board.

The best is the folding ironing-board. It is hinged to the wall. When not in use it is hooked up against the wall. It has a single leg, which, hinged to the board, falls flat against the latter when the board is hooked up. The board should be made of well-seasoned plank, $11\frac{1}{2}$ inches thick, 57 inches long (rounded at free end), 15 inches wide at the attached end, and $10\frac{1}{2}$ inches wide at the free end. Attach 33 inches from the floor.

Covers For Board.

For a cover on the ironing board take the length of it of new unbleached muslin and sew tapes on the sides and ends, pull the muslin tight over the board and tie. This can be changed often.

When wanting to cover iron board and have no old blanket, take cheap roll of cotton, pad it over evenly and stretch muslin cover.

A blue denim cover to fix over ironing boards saves the white one and is fine for pressing suits. Wash before using to see if color is fast.

Clamp the ironing stand firmly to the ironing boards, then there is no chance of it slipping or the irons falling to the floor. Also clamp the sleeve board to the board, then it will not shift about; fine when ironing baby clothes.

Tack a heavy pad on the narrow end of ironing board on

left end as you stand to iron. Pad should be 10 inches wide. Cover smoothly. Iron initial on linens and all embroidery on garments on this.

When in a hurry to iron dry clothes, sprinkle them with very hot water, or use cold water and wrap them in a bath towel, placing them in a moderately hot oven. They will be ready to iron in half an hour.

Always place clothes in two piles while ironing. Those needing mending in one lot and the others in the other. It is easy to see those that need mending or a missing button while ironing.

Electric Iron.

If the electric iron spits fire, the cause is poor contact. If the cord is severed, cut the insulation off each end of these broken pieces, scrape clean and twist back together again, wrapping the exposed surface with adhesive tape.

A Gas Or Gasoline Iron.

They weigh about four pounds, look like an electric iron, but have an inner burner which heats like a gas iron, except that the heat is generated from gasoline kept in a small tank supported by the iron. There is no danger. About 1 cup of gasoline will last two hours ironing. It can be used or carried anywhere.

When Ironing Calicoes.

Dark calicoes should be ironed on the wrong side with irons that are not too hot.

Ironing over Hooks and Eyes.

To iron over hooks and eyes and buttons, lay a turkish towel four double on the table, and lay the buttons, hooks and eyes face down, ironing on the wrong side.

To Prevent Clothes Sticking.

Add a tablespoonful of salt in the water, when boiling common starch.

Ironing a Blouse.

To iron a blouse with buttons on it. Take a rough towel folded several times, lay the buttons face downward on it and iron over the backs. The buttons sink into towel and material is made smooth.

To Make Linen Glossy.

If a gloss is desired for linen add a teaspoonful of salt to the starch when making.

Crepe Clothes.

They need not be ironed. The garments, should be carefully hung on the line, shaken into shape, and dried on the stretcher to get the best results. If there is a collar, belt or cuffs of other material, it needs to be ironed.

To Iron a Centerpiece.

Do not stretch the round centerpiece on the bias before ironing, but treat it as though it were square. Stretch first with the warp, then with the woof of the material, and iron in the same way.

Ironing Table Linen.

Be sure to iron with the warp. Iron first on the wrong side and then on right.

Care Of The Iron.

Scrape the starch off of the irons frequently and rub over salt; they will give the best service.

To smooth rusted flatirons, take a rough piece of toweling and cover it with salt. Rub the heated iron on this, then on a piece of clean rough cloth.

Save paraffine paper which comes with packages of fancy biscuit and use to wipe the bottom of the irons on ironing day.

To Remove Scorch Spots.

Damage done by an over-heated iron can be removed by wetting the scorched place with water, and then applying to it a thick paste made of ordinary lump starch, with just enough water added to make it stick well. Use plenty of the paste and let it dry on the material. Then, when dry, rinse all the starch out with water, so that the iron will not scorch the garment again, or dampen with Peroxide of Hydrogen. Press and put in sun to dry, or lay the scorched portion over a deep cup and press down cloth to bottom of dish while you pour on boiling water, wring in a cloth till nearly dry then press.

To remove scorch marks from Linen cut an onion in halves and rub the scorched part well, soak in cold water.

A scorch on silk or wool generally means the fiber is destroyed. Place a damp cloth over scorch and iron again. It may help.

How to Get Rid of Pests

ANTS.

Non-Poisonous Insect Powder.

Mix together well one pound of wheat flour, six ounces den-tists plaster paris, two ounces sugar. Place a teaspoonful in a saucer where needed. It is sure death to ants and harmless to humans.

Method to Drive Ants Away.

For black ants pour bisulphide of carbon in holes outdoors and place a piece of paper over hole and hold in place with stone.

Sprinkle borax around places where ants get into house, and make circles of borax around legs of ice chest and tables. Cracked green walnuts in place of borax are used.

Ant holes and ants are destroyed by pouring kerosene over them and setting on fire.

Soak small old sponge in sweetened water and place on dish in pantry, when sponge is full of ants place in boiling water. Also place legs of table in crock full of water. Lard a plate and when full of ants drop into boiling water. Where there is no food place camphor on floor or on shelves.

Bed Bugs.

Remedies.

The most efficient remedy for the bedbug is to fumigate the infested house or rooms with hydrocyanic-acid gas. This gas penetrates into every crevice in the house or room where the bedbugs conceal themselves and has an immediate effectiveness. This method should be intelligently employed, as the gas is deadly poisonous. A bulletin for such fumigation is issued by the Department of Agriculture.

The fumes of burning sulphur are also an efficient means of control where the conditions are such that this method can be used, readily destroying the insects in all stages, including the egg. The treatment is inexpensive compared with the use of hydrocyanic-acid gas and offers much less risk of danger to human beings. There is, however, a considerable risk of injury to household fabrics, furnishings, and wall papers from the strong bleaching quality of sulphur fumes. This danger will be diminished if the fumigation is done when the room or house is thoroughly dried out, by a furnace or other heating system. Remove all metallic surfaces from the building, or protect them with a coating of vaseline. Use two pounds of sulphur for each 2,000 cubic feet of space, and the building should be closed for the treatment for 5 or 6 hours, or preferably for 24 hours.

Sulphur candles may be used or fumes can be generated by burning the sulphur in a dish placed in the center of the room, set within a larger vessel. Precautions must be taken to prevent accidental overflowing or the starting of a fire, and after the fumigation the house should be given a thorough airing.

It is possible that if infected houses in cold climates be opened up and allowed to remain at a temperature well below freezing for a considerable period, all eggs and the young, and possibly most if not all of the adults, would be exterminated. This is practicable in the case of summer houses in the north which are left untenanted in the winter. The superheating of houses in midsummer to a temperature of 130 degrees F. may be one of the simplest and most effective means of eradication of this and perhaps other household pests.

To allay irritation from the bite of the bedbug use peroxide of hydrogen, or dioxygen.

Tincture of iodine either at ordinary or double strength is also a good counter-irritant for use in cases of flea, mosquito, bedbug, and other insect bites, but use with caution on the tender skin of small children and on those who have eczemic disorders.

FLEAS.

How To Kill Fleas On Cats, Dogs, And Hogs.

Wash the animals thoroughly in a tub containing the proper proportions of asaponified coal-tar cresote preparation, known as "stock dips." The animal should be scrubbed thoroughly, seeing the fleas on the head are well soaked, first. After the animal has been in the bath for 5 or 10 minutes remove and dry. In the case of cats, wash out the fur with warm soap water when animal is taken out of the solution.

Washing infested animals in kerosene emulsion is a cheap method of destroying fleas. Five gallons of emulsion may be made by dissolving 2 ounces of washing soap in 1 quart of hot water and when brought to a boil removing it from the fire and adding 2½ pints of kerosene. The mixture should be agitated violently with an egg-beater. This results in a milky mass from which the oil does not separate. Water is then added to make 5 gallons. Free kerosene will burn animals, and if any separates out of the mixture should be reheated, avoiding spilling it on the fire or boiling it over, and then beat again.

For Flea Bites.

A 3 per cent solution of carbolic acid in water applied to the bites will be beneficial. Menthol, camphor, and carbolated vaseline will allay the irritation. Iodine tincture, applied to the bites, will alleviate the irritation, but do not use on persons afflicted with eczema, or on to the tender skin of young children.

To Get Rid of Fleas.

Expose garments or bedding infested with fleas on sand. If the sunlight is strong enough to raise the temperature of the sand to 120 degrees the fleas will be destroyed within an hour, provided there is shade where they can take refuge.

FLIES.

Use of Screens.

Screening windows and doors during summer, with use of fly paper is protective against house flies. Keep food supplies screened or covered. Screening does not decrease flies that breed in the house but lessens danger of food contamination. Swat the fly.

Fly Paper and Poisons.

Use sticky fly paper to destroy flies. Commercial poison preparations contain arsenic and their use is dangerous where there are children. A very effective fly poison is made by adding 3 teaspoonfuls of commercial formalin to a pint of milk or water sweetened with a little brown sugar.

Mix together half a teaspoonful of powdered black pepper, one teaspoonful of brown sugar and one of cream and place it in room on a plate, and flies will soon disappear.

To Drive Away Flies.

Use the nozzle of a vacuum cleaner and it will gather more flies than any trap.

Burning chrysanthemum leaves in a house will drive away flies.

See there is no refuse pile in back yard or disinfect with kerosene or chloride of lime. Flush drains, cellars and sinks with a reliable disinfectant. Keep garbage pails clean. Cover all food with screens, and use netting over baby's crib.

To Destroy Mice.

Use tartar emetic mingled with some food. Pieces of camphor gum placed with seeds or in drawers or trunks will keep mice away, as they do not like the odor. Moth balls and turpentine can also be used. A little oil of peppermint will cause mice to move. Stop their holes with pieces of laundry soap in which pins or wire nails have been stuck. A mouse hole can be effectually stopped for all time by passing over it a piece of cloth which has been liberally sprinkled with red pepper.

Bacon for Bait.

Instead of the usual tid-bit of cheese put a small piece of bacon in the mouse trap.

Another Remedy.

First find the holes where the mice come into the house. These may be around the water pipes of the sink, bath room or ize box. Have these holes corked up with waste, then putty and finally cover with shellac. There is a poison, "Rough on Rats," which is to be spread on bread with lard or cheese, and

set under bureaus, in closets, etc. It often proves very effective but should never be used where there are children.

A Thimble for a Mouse Trap.

Put some moist cornmeal in an ordinary thimble. Then put a china bowl, upside down, the edge resting on the large end of the thimble. The mouse will go under the bowl and begin to nibble at the meal, pushing the thimble outward to secure the last bits of meal adhering to the sides. This will cause the bowl to slip down over the mouse.

MOSQUITOES.

Apparatus to Catch.

Homemade apparatus in common use is effective. It consists of a tin cup or a tin-can cover nailed to the end of a long stick that a spoonful of kerosene can be placed in the cup, which can be pressed up to the ceiling to inclose one mosquito after another. When covered the mosquito will fly in the kerosene. By this method mosquitoes in a bedroom resting on the ceiling can be caught before one goes to bed.

To Kill Mosquitoes.

Get some pyrethrum at a drug store. Pour out a saucerful and add a spoonful of alcohol, and let it stand in the room. Shut doors and windows, and vapors harmless to humans will fill the air, drawing the pests from their hiding places. Those high up should be killed with a swatter; the others will be overcome by the fumes, and need simply to be swept up and destroyed.

TO EXTERMINATE RATS.

Brown rats burrow in the earth. For this variety, use strongly built cage traps at least 18 inches in length. Use plenty of traps, a dozen, the object being to catch many in the shortest possible time. Examine the traps before setting and make sure there are no apertures through which escape is possible. See that the trap door swings freely as the trap is turned over and back.

Baits having strong odors are best, and over-ripe cantaloupe the most satisfactory. Tomatoes, cheese, limburger, or canned salmon, may be used. Use plenty of bait. It is of the utmost importance to cut off the usual food supply of rodents when trapping or poisoning.

Place traps near entrance holes which are always found along walls, fences and the like. Cover them with hay, boards, old sacks or better still, wrap them in newspapers.

Trap steadily as long as any catch is obtained. If rats are still numerous leave the traps open until the bait disappears regularly, when the traps should be closed. This procedure may have to be followed before any rats are caught. When no more can be caught with cages, a change to snap traps will net

a few more, after which barium carbonate poison may be tried. Repeat at intervals of four to six weeks, which will get the new litters.

If plague is suspected, the rats should be sprayed with coal oil or distillate to kill the fleas.

Deodorize traps in which rats have been drowned, scared or teased. This may be done by wrapping the trap in a newspaper and burning the paper off after standing the trap on end.

For Black and Alexandria rats (house rats and roof rats), use snap traps and use plenty of them. Get a dozen, depending on the available places to set them.

Bait with cheese or crisp bacon and sprinkle the trap with cornmeal.

Regulate these traps so that they trip quite easily. This may be done by bending the staple which holds the trigger wire, as the case seems to require. This wire should be molded to proper shape when it becomes bent, as it often does. Traps may be tested without danger if the thumb of the hand which holds the trap is arched over the spring wire and pressed firmly against the trap in front of the wire. If spring either by accident or design, the wire strikes the thumb and is stopped without harm to the operator.

Place the traps in the runways if possible. These may be traced by the rat-crescents and other black marks made by the bodies of the rats as they climb woodwork, pipes, etc., or pass under obstructions. Traps should be fastened with strings so as to fall and hang when sprung, to prevent the next rat from satisfying his hunger at the carcass of a dead rat. Trap until results are negative. Barium carbonate poison may then be tried. Repeat the program in a month to six weeks. Trap periodically but persistently. Study your problem. No two premises present the same one. Snap traps do not require deodorizing.

Poisons best adapted for rats are barium carbonate and phosphorus. They are slow in action and cause rats to leave the premises for water. Barium carbonate is not poisonous to domestic animals or man except in very large quantities.

Phosphorus is poisonous to all animals. Barium carbonate is mixed with cornmeal, flour or oatmeal, one part of the carbonate to four of cornmeal or flour, or to eight parts of oatmeal. Water is added to make a thick paste. This poison is on the market in pellet form ready to use. The commercial product is used and can be obtained at the wholesale drug firms. Poisoned barley is practically worthless as a rat poison.

Use a mixture of pounded glass and cornmeal and place where they run, or collect some thin chips, pieces of shingles or tin, and pour over them enough molasses to cover them well. Sprinkle dry lye over the chips and place them in every rat hole. The rats will soon move out.

Rats are a menace to public health and create enormous loss.

SMUDGES AND FUMIGANTS.

Anything that will make a dense smoke will drive away mosquitoes, and various smudges are used by campers. Hang a camphor bag in an open easement.

Camphorated spirits applied as perfume to the face and hands will prove an effectual preventative; but when bitten by them, use aromatic vinegar.

A bag full of naphthaline suspended inside a closed well or lamp or candle. The smoke will drive them out.

A bag full of naphthol suspended inside a closed well or cistern will drive away the female mosquitoes, which seek these places to lay their eggs, without imparting any unpleasant taste or odor to the water.

Remedies For Mosquito Bites.

Wet the end of a piece of ordinary toilet soap and rub it gently on the puncture, and the irritation will soon pass away. Some recommend household ammonia, alcohol, glycerine, or iodine. Holding the hand to a hot lamp chimney will relieve.

Mosquitoes hate castor beans.

If you are annoyed plant them about the house and hang some branches in the house.

To Get Rid Of Water Bugs.

Roaches are a menace to the health of any household, as they carry infectious germs to your food. They carry tuberculosis, dysentery, and typhoid. The cockroach, appears once in a while, but the small "Water Bug" or "croton bug" is with us always. Roach pastes sold at drug stores are mixtures of honey (or molasses) and phosphorous. They kill some roaches and now and then a human being, or domestic, being so fatal there is no known antidote. A pitcher partly filled with stale beer will catch nearly all the roaches in three or four nights. Lean sticks up against the pitcher and bend over downward so as to give the insects an opportunity to climb up and fall in. They like stale beer better than anything in the world.

Cock-Roaches.

Borax sprinkled about the parts where they hide, or common bracken fern laid down in places frequented by cockroaches will drive them away. Dissolve alum in hot water; make it strong; wet all places where roaches run with this solution.

Boiling water in which tobacco has been steeped, poured along the thresholds of the house is good.

Use a powder (Roachalene) that they eat and then shrivel, use a strong solution of carbolic acid 2 lbs. to pt. water poured in cracks and openings. Repeat several times if necessary.

To Get Rid Of Silverfish.

This bug damages books, wall paper and food, and will eat

any starch on clothing. Mix a little arsenic with boiled starched paste and spread on cardboard, and when dry put in crevices, bookcases, behind mantels and in bottom of drawers. Dampness encourages their presence.

To Kill Lice.

Saturate your hair with kerosene, wrap in towel and leave 30 minutes. Then wash well with soap and water and saturate with vinegar and in 30 minutes wash out vinegar. Keep away from fire during treatment. Comb with fine toothcomb. Examine other members of family.

Or wash with decoction of stavesacre, or with lotion of the bruised seed in vinegar, or rub with salve made of lard and one fourth of weight of the seed, well beaten together.

To Destroy Wasps.

Spray their nests with gasoline, protecting the face and hands.

For Gnats.

A little oil of lavender rubbed on face, neck and hands will drive them away.

For Sparrows.

Hang where sparrows are nesting a few cheese cloth bags containing mothballs.

To Kill A Cat.

The most merciful way is to chloroform it. Draw an old sock over cat's head so toe does not quite touch its nose. Pour drug on sock close to cat's nose. Soak the same place three times and cat will not wake up. If a cat is not a pet it may become a pest.

A Fumigant.

With one ten-cent can of chloride of lime, and one ten-cent bottle of ammonia, you can fumigate four rooms. Take any old tin pail, put in center of room open all doors; then put one-fourth of a can of lime in your pail and add to it one-fourth bottle of ammonia. Leave the room for three hours. This is simple, and not dangerous.

The best window screen.

The best screen is the sixteen mesh. The galvanized is the most economical screen to buy, as it lasts three times as long as the enamel black wire. The copper is the most costly, but after a few months does not look as good as the galvanized.

To kill all insects.

Oil of red cedar, open all receptacles in the room saturate

bits of cotton with oil of red cedar (3 oz. for large room, or common cedar oil in larger quantities) and scatter about the room, being careful not to let it get in contact with furniture or clothes. Keep room closed 2 days.

Picnic Hint.

Take a sponge and some oil of lavender along on picnics if insects bother. Saturate the sponge and hang it over the table.

Sick Room Hints

The Sick Room.

Select a large, airy, light and pleasant room. It should be as quiet as possible.

Before the room is occupied by the patient, it should be stripped bare of all hangings, carpets and upholstery. Unnecessary articles of furniture should be removed. A light iron bedstead, one chair and a table are sufficient furniture.

Clean the walls and woodwork before bringing in the patient. This can be done by wiping with a wet cloth.

Keep the room always at a temperature of seventy degrees.

Avoid all sweeping. Depend upon scrubbing for cleansing the floor.

Avoid dusting with a brush. Use cloths dampened with a disinfecting solution, one teaspoonful of Camphenol to one quart of water for walls and furniture.

Let in all the direct sunlight possible unless it seems to hurt the patient's eyes.

Bedding should be changed frequently. Throw the soiled bed clothes into a tub or pail containing a disinfecting solution.

Towels, napkins or bandages should always be clean. They should be taken from the room and disinfected after each time of using.

All dishes, cups, glasses, spoons and utensils which have been in the sick room, should be disinfected before being taken out. Scalding hot water and lysol solution are effective for this purpose.

Toys, shears, vases, combs, brushes, or anything that has come near the patient should be disinfected or destroyed.

It is a good rule in these diseases to consider that everything that has been carried into the sick room has become infected and needs disinfecting before being used elsewhere.

The dishes which the patient uses should not be used by others or washed with other dishes.

The food should be brought into the room just before the patient is ready for it.

All unused articles of food should be burned, or else mixed with a disinfectant and buried. Milk or other food must not be allowed to stand in the sick room, whatever drink or food has been in the sick room, must not be used by another, or fed to dogs or cats.

The bodily discharges from the sick should all be considered dangerous. The eruption of some diseases, though ordinarily supposed to appear only on the surface of the skin are equally common inside the body, throughout the whole alimentary canal. Therefore care must be taken to avoid infection from the discharges. Discharges must be considered to include the sputum is the source of infection in consumption, diphtheria, and other diseases.

Contagious Diseases.

Infectious, contagious or communicable diseases are spread by means of germs, given off from the body of the diseased person and may be passed from infected persons to furniture and clothing, or find their way out into water, food and air, and may be introduced into the system by breathing, eating and drinking, or through the skin.

In these diseases certain parts of the body are breeding places for disease producing germs, thus discharges from these parts give them off in the greatest amount. In such cases extreme care must be exercised. Burn all rags and sterilize sputum as well, for the sputum is the source of infection in consumption, diphtheria, and other diseases.

Personal Care.

Bathing should be frequent, at least once every day. An antiseptic soap is advisable for this bath.

Frequent changes of clothing are most necessary.

As much as possible avoid sitting down in the sick room, especially sitting on the bed, or leaning against bed, walls, or furniture.

Wash the hands with antiseptic soap after each contact with the patient.

Exercise regularly, if possible in the open air.

Sleep as much as usual. If the patient needs constant care, another attendant should be procured; much depends upon the bodily fitness and cheerfulness of the attendant.

Care and anxiety must be dismissed if possible. The mind, as well as the body, should be in healthy and active condition.

Remember, it is a duty to the patient as well as to yourself to guard against infection.

Nurses should wear a washable uniform which should be changed frequently. A washable cap should cover the head.

If the same nurse is attending more than one patient, she should never go from one to another without walking in the open air, to air her clothes; and if she is compelled to touch either patient she should immediately cleanse her hands.

Keep so far from a sick person that his breath will not reach you directly. Above all do not take his breath into your own lungs, as in kissing or whispering.

Do not put to your lips any food, drink, dish or utensil that the patient has touched, or that has been in the sick room.

Do not go into the sick room with an empty stomach.

Do not eat or drink in the sick room.

Wear no clothing that the patient has worn just before, during or just after his sickness.

Keep the hands free from all discharges from the sick. If the hands are accidentally contaminated, wash them at once with antiseptic soap.

If the hands are scratched or cut, put court plaster or Cotolia

over the wounds. Never touch the sick with sore or scratched hands.

If the patient is sick with any of the eruptive contagious diseases, such as smallpox or scarlet fever, take every precaution not to come in contact with the scales or scabs of the skin.

Kill or drive out of the sick room all flies or other insects. Be sure to destroy all mosquitoes.

Excreta from the bowels or kidneys should immediately be covered with a disinfecting solution. The vessel containing the discharges and disinfectants should be shaken and after half an hour thrown into the watercloset or if there be no closet with sewer connection, buried in the ground. The discharges should never be thrown where they might contaminate a running stream.

Vessels used to catch discharges should be thoroughly cleansed with boiling water and a disinfectant.

Sick Room Chart.

Keep a chart in a sick room and write on it a schedule of all the things to be done for the patient, baths, medicine, meals, etc., each opposite the hour when it is due. Cross each off as it is attended to, and you have a system that is positively safe.

The Sick Bed.

Set an invalid's bed well away from the wall, to avoid all possible vibrations.

Window Screen.

Make a frame to fit one-half or one-fourth the window in a sick room, and cover it with cheese cloth. You will have plenty of fresh air and no possible draught. This is especially valuable in sickness as it excludes the dust of the outside air.

Mending a Water Bottle.

A rubber hot water bottle can be mended very satisfactorily with strips of rubber adhesive plaster such as is used to fix up temporarily a leak in an automobile tire.

A New Test of Death.

A drop of ether injected into the eyeball is recommended by an Italian physician as the most reliable test of death. If life is still present the ether will cause a reddening of the eye, but if death has taken place there will be no change.

To Drop Medicine.

Shake the bottle so as to moisten the cork. With the wet end of the cork moisten the edges of the mouth of the bottle, then, holding the cork under the mouth, let the fluid pass over the cork in dropping.

To Clean a Sick Room.

The best way to clean an invalid's room is to rub the carpet with a cloth wrung out of ammonia, rinsing and turning the cloth as the dust and dirt collect upon it. Change the water frequently. This is far better than sweeping and raising a dust.

To Cool a Sick-Room.

A piece of ice in a pan, covered with flannel and placed on the window sill, is a simple method of cooling the air in a sick-room.

When an Arm Is Hurt.

In caring for a patient whose arm is paralyzed or hurt put the injured arm in the nightdress first, then the well one. Reverse this order when undressing.

A Refreshing Odor.

An agreeable method of changing the atmosphere in an invalid's room is to put some eau de cologne into a shallow dish and set fire to it. The spirit will make a pretty flame and impart a delightful odor to the air.

To Preserve a Hot Water Bottle.

Fill with air, cork tightly and hang in cool dry place. This keeps the walls of the bottle from coming in contact with each other and prevents deterioration and decay.

To Keep Ice for the Sick.

Cut a piece of clean flannel about eight inches square, put this (after making a small hole in the center) over the top of a glass tumbler, then bind the flannel fast to the tumbler with a tape or cord. When ice is put into this flannel cup, lay over it another piece of clean flannel three or four inches square. So covered, it will keep for hours even in warm weather.

Milk Used in the Sick Room.

Baked milk can be taken and retained by the most delicate stomach. Put milk in jar; cover the top with white paper. Bake the milk in moderate oven until it is as thick as cream. It is most digestible when eaten lukewarm.

Purifying the air.

In case of contagious illness. Cut up an onion and place it in the sick-room, replacing it every hour. This will purify the air. Dried sage, or coffee, or sugar on a hot shovel will take away any disagreeable odor. An easy way is to set fire to a cotton string, pinch out the flame and let it smoke. A few drops of oil of lavender poured into a glass of hot water will purify the air in a sick room.

Lime water is the pleasantest disinfectant for the sickroom as it has no odor.

Whispering.

Never whisper in a sick room. It annoys a patient unbearably.

Saving an Invalid's Nerves.

Never let visitors to a sick-room sit on opposite sides of the invalid's bed and talk to each other across it. Nothing is more nerve-racking for an invalid than to be forced to keep his head turning from side to side to follow the rapid-fire conversation going back and forth.

FUMIGATING.

An efficacious way of fumigating a room is with Hydrocyanic acid gas. This gas is made by putting three (3) ounces of Cyanide in a liquid composed of three (3) pints of water and one pint of Sulphuric acid. It will, rid it of other contagious germs, bed-bugs or vermin. Close all windows or doors, stuffing towels in cracks under doors and leaving window unlatched. Place liquid in a large crock with a piece of tin or wood underneath. Then hold the nose and breath, drop the Cyanide in the liquid and get out of the room. After the room has been left for two (2) hours, get a pole and shove up the window from the outside. Great care should be taken with this as it is a deadly poison and one whiff or two will kill. Be sure not to leave any eatables in the room, and keep out of the house during the period of fumigation.

Disinfection.

To prevent the spread of infectious disease the sick room should be immediately fumigated after the recovery or death of the sick one. All valueless things should be burned especially old rags of every kind. All other things used by the patient or that were there while the patient was in the room should be left in it during disinfection. After disinfection air the room out well and wash the wood work with a solution of camphenol or better repaint the room.

One way of disinfecting is to use sulphur fumigator which can be purchased cheaply from the druggist with directions.

A very powerful disinfectant is Formaldehyde gas. There is at most drug stores a small compact candle which on burning yields up this gas. It is called Lister's Formaldehyde Fumigator. Close up the openings in the room, leaving a window unlatched so it can be raised from the outside with a pole after fumigating. These fumigators are so powerful that one will be enough for an ordinary sized room. It need only be lit. It will not tarnish metals or injure fabrics.

Miscellaneous Hints

Paste That Will Stick.

Add to one-half teaspoonful of starch and same of flour, a little boiling water. Let it stand a minute, add more water, stir and cook it until thick. It spreads smooth, sticks well and will not mould or discolor paper. Adding ten drops of oil of cloves to one-half pint of this preparation will make it more permanent.

Mix $\frac{1}{4}$ tablespoon salt into 1 qt. water and boil. Take a large half-teaspoon flour and stir into it slowly enough water to make a thick cream. Pour the flour into the boiling salt water, stirring constantly. Add a piece of tallow as big as a small marble, cook 5 minutes then $\frac{1}{4}$ oz alum dissolved in boiling water. If lumpy, strain thru a cloth. A few drops of oil of cloves will keep this.

Fire Prevention.

When moving into a house, tack up or write near the telephone the number of the fire department and have the members of the family commit it to memory as light may be unavailable. Keep a garden hose attached to the rear faucet as well as the front one.

Use gasoline outside the house for all purposes. If this is not possible use it near an open window and keep one door open.

Sympathetic Ink.

Dissolve some sulphate of iron in water and write with it. Heat, and the writing will come out dark brown or black.

Take some pure lime or lemon juice and write with it on paper. Heat the paper over an alcohol lamp and the writing will come out brown.

When We Work Best.

Autumn and Spring are the best seasons of the year for all kinds of work. At a very low temperature both mental and physical work are depressing. Mental work reaches its highest efficiency at a temperature of 38 degrees, while physical work reaches its maximum at 59 degrees for men and 60 degrees for women. Recent investigations show that weather variations are distinctly good for us and promote our mental efficiency.

Cleaning Gold and Platinum.

First brush with soapsuds, then dust magnesia powder over the article and allow it to dry. A few rubs with a cloth makes the article shine with great lustre. Magnesia powder is inflammable, so keep it away from fire.

Rags and Paper.

Save rags and paper of every kind. They are useful and in quantities can be sold in any large City.

To Destroy Weeds.

If you have weeds in your gravel walks, make a strong

brine with one pound of rock salt and four quarts of boiling water. While boiling hot, pour on the weeds and the roots will be killed. If not, repeat the process. Be careful not to let solution come in contact with plants.

A Garden Without Weeds.

Weeds should grow until large enough to be pulled up. Go over the garden with a hoe after every rain, as soon as the soil is nearly dry. This will aerate the soil and keep down the weeds. Begin early in the Spring and you will have no weeds.

When Peony Buds Drop.

Fresh slack lime applied to the ground in the early Spring and stirred in well will counteract the acid in the soil, which often makes peony buds turn black and drop off.

For the Army Worm.

Spray heavily with arsenate of lead. Spray the lawns and all plants and shrubs. Do not wait until the insects arrive. Spray at once and keep all foliage well covered with the spray.

Care of Potted Ferns.

Punch three small holes in the soil about the fern and pour in one-half teaspoonful of castor oil in each hole. The oil stimulates the ferns and they grow more.

For Your Ferns.

As ferns grow toward the sun, they should be turned each day to keep them from growing over on one side.

When Flowers Are Most Fragrant.

Flowers are more fragrant when the sun is not shining on them, because the oils that produce the perfume are forced out by the water pressure in the plant cells and this is diminished by sunlight.

How to Water Shade Trees.

A practical device for watering trees on sidewalks is to get a tube of iron or lead bent into the form of a ring large enough to encircle the stem of the tree, so that this ring may be placed just above the roots and then filled over with earth, leaving the end of the pipe above the surface of the ground. The top of the ring is pierced with a large number of small holes. The end of the ring can be connected with the hose and any desired amount of water may be slowly supplied to the roots without waste or loss of time. This also allows ventilation to the roots.

Spiders Help Trees Grow.

Do not destroy spiders. They spin their webs and thereby attract insects, ants and other things that are harmful to trees and when they arrive they dispose of them without cost to the owner of the trees.

A Cheap Flowerpot Stand.

An ordinary cheese box with wooden clothespins stuck

around the edge inverted and stained black, makes a very attractive Japanese flowerpot stand for Summer homes.

Preserving Flowers.

Gather flowers after sunset, and put away for the night in a cool place, in lukewarm water. To revive partly wilted flowers, put the stems into warm water and set them away in a cool, dark place.

For Short Stemmed Flowers.

Bird gravel is excellent for putting in a bowl to hold up short-stemmed flowers.

Watering House Plants.

The entire pot should be put into a pail (or the bath tub), with water almost, but not quite flush with the top of the pot. Leave plant there for an hour, and the water will soak through the porous earthenware or will be sucked up through the hole. The moisture will seep through the soil as it does outside in a state of nature, without a flood on the surface to harden the soil and keep the air from the plant.

To Keep Flowers.

When a bouquet is received, sprinkle it lightly with fresh water. Put it into a vessel containing some soapsuds; take every morning and lay it sideways(the stalk entering first) into clean water; keep it there a minute or two, then take it out, sprinkle the flowers lightly, by hand, with water. Replace it in the soapsuds, and it will bloom as fresh as when first gathered. The Soapsuds needs changing every three or four days. They will keep for a week if this rule is strictly followed.

A Clean Yard.

A box on the back porch for rubbish will keep the yard clean. Have the box hooked to the porch on a level with the top step, so that dirt may be swept directly into it instead of over the step into the yard. The box may be easily unhooked and emptied.

Cleaning the Garbage Container.

A garbage container should be made of such material that sterilization is possible. Galvanized iron is commonly used. The can should be thoroughly cleansed with hot soda solution at least once a week, and, especially in hot weather, chloride of lime or other suitable disinfectant should be used liberally.

Prevent Snow Clinging to Metal Shovel.

First heat shovel, then rub it with ordinary candle. This absolutely prevents snow from clinging to shovel.

For Ailing Plants.

As an antidote for fungus diseases as well as scalelice lime mixed with a little sulphur and stirred into the soil about plants is excellent. This should be used frequently and when the soil is rather dry.

Ashes.

Wood or vegetable ashes, not coal, are good for plant fertilizer when well mixed with soil.

Best Way to Swing a Hammock.

Do not take all the sag out of it. The straighter a hammock appears from one support to another the greater will be the tension on these strings. In a hammock swung so that the sag is very small a 150-pound man may cause a 300 or 400 pound force on the strings at each end.

For the Orange Tree.

Use 1 lb. Gold Dust Powder to 5 gal. water. Apply the spray in the evening so as not to burn the new growth. If any scale are remaining after three weeks, apply a second time.

Why Cigars Don't Draw Well.

Air can not get in when cigars are too tightly rolled. A hat-pin thrust down into the cigar will remedy this. Too much air is drawn in, in a too loosely rolled cigar. The only remedy is to close the holes.

Picking Out Servants.

In picking out servants, judge a good deal about them from their eyes. Beware of the shifting eyes that always look away from you. Small eyes usually mean an alert mind. If they look straight at you, steady and bright, like a squirrel's, you may expect a right sort of cleverness. If the small eyes are dim and do not look straight at you, you may look for the wrong kind of cleverness, for dishonesties and faults. Large tranquil "cow like" eyes are less responsive than alert bright little beady eyes. Round protruding eyes indicate ambition and love of action. Persons with long eyes are mostly dreamers.

System in Housekeeping.

Housekeeping is a business, and is subject to the same rules and regulations as any other business. Many women who have a contempt for their husbands, on account of the poor business methods and habits of the same, fail to look in the looking-glass and discover their own poor system and methods in housekeeping. While skimping in a household is not good, neither is extravagance or waste. There is a happy medium, for the housekeeper to discover in her own household. While her husband is establishing system in his business and eliminating waste as much as possible, she should do the same in the home for their mutual advantage.

The average house today could be maintained with one-half of the work that is now devoted to it by the housewife if she would adopt some system for managing her business. As it is, she often wastes her resources, her strength, and her nerves through lack of system. All this nervous condition brings dissension in the home and among its members.

The essential thing is to have a place to keep things. It will then follow as the night the day—that things will be put there without devoting much thought to them. It is easy to keep a house in order if it is equipped with adequate storage facilities. Articles used for similar purposes should be stored together, and boxes and drawers should be labeled. Things that have outlived their usefulness should not be kept, for they have to be taken care of and unnecessarily handled many times.

Compact and orderly arrangement in a clothes closet makes cleaning easier. Dresses, coats, and like garments may be kept on hangers on a rod across the closet, and shoes may be kept on a shelf near the floor of the closet. The clothes closet should be aired each day: leaving the door open every night is a good plan. Occasionally everything stored in the closet should be taken out, and floors, walls and shelves thoroughly cleaned. Dusty closets are likely to harbor moths.

In every store there is kept what is called "A Want Book." This is a book where one enters a thing that is needed in the household, an article of food, or an errand to be done, and each thing when found to be needed should be put in the book, to be referred to later. The book, of course, should be kept in the most convenient place in the house. If the house is a two-storied one, two such books should be kept, one upstairs and one down.

Why Husbands Leave Home.

The statistician of the Bureau of Public Welfare of Chicago gives the following reasons for desertion after investigating thousands of cases.

Ill health and peevishness of the wife.

Slouchiness of the wife in her person or in her housekeeping methods, or both.

The wife's habit of nagging or gossiping.

Dislike for children on the wife's part.

This statistician found that the strongest incentive to reconciliation is almost invariably the child, and that very few wives are deserted who are:

Physically big and mentally cheerful.

Able to contribute to the family income either by outside labor or by frugality in home management.

Affectionate and home-loving.

Sympathetic and considerate of their husbands.

His conclusions also showed that native born American husbands desert their wives more than the foreign born, and that married life is happiest when husband and wife are nearer alike in age, nationality, religion, moral standards, temperament, health and physical strength.

Man Needs A Woman's Help To Choose A Wife.

Woman understands woman. There is a certain look and feeling that passes between them which man does not understand. Someone says that a woman can see another as plainly as her own image in the mirror, and that a sensible woman never tries to fool another, never posing before another, for they meet face to face. You can't wear gingham and pretend it is lawn. Neither can a woman paint her complexion or color her hair and another woman not know it.

A woman does not need to know another for a number of years to form an opinion of her—one glance will do. How many men have said they wanted their wives to meet another man's wife because she was such a fine woman, and when the meeting took place how many wives have said "cat," and promptly dropped the acquaintance. You can cheat a woman on stocks a good deal easier than a man, but you can never cheat a woman on another woman's character.

The feminine instinct is to surrender fully before her own sex, as the private citizen to the highway man. When a woman of poor character meets a good woman there is a dropping of the eyelids, an unspoken confession of "you know my type," when she would pose as a moral woman before a preacher.

Woman is always a good judge of character. Her power of analysis, of intuition and of natural instinct usually exceeds that of man. Although she has been known to overestimate the value of man and to misjudge him, with woman she never fails. Therefore, before blind man, so sure of himself in the business world, ventures into matrimony, let him present his intended wife to some wholesome woman neutral as to his motive. No matter how hard-hearted a man may be he softens when he meets the weaker sex. So if a man wants to know his wife-to-be as she is, he needs the help of a sister, a mother or a woman friend. He might introduce all his male friends to her, and hear she is a "peach", but when he introduces her to one woman he gets the truth. He finds out just what the woman is.

One nod or one wink from another woman would save a man years of pain and suffering. If another woman admires her his married life is very apt to be ideal.

Woman Needs A Man's Help To Choose A Husband.

For the same reason that a woman knows more about a woman, a man knows more about a man. Many a woman would have a better husband if she found out about the man through a neutral male friend. Women are too prone to be romantic toward good looking, plausible talking men. One philosopher says that a woman's heart can be easier unlocked with a brass key than with a gold one.

The male friend can help her spot a four-flusher. No young girl should ever marry a young man unless she knows his real

prospects in life or obtains a reliable opinion as to the worth of the intended, and that he is such a man that will some time amount to something. This opinion she can not form herself as she is generally too inexperienced in the affairs of the world to form one. Father is usually a better adviser in such cases than mother.

Did You Ever Kill Anybody?

It seems absurd to ask such a question: but if it were answered truthfully by everyone we would find that a large percentage would have to plead guilty.

Public officials by failure to enforce the laws against unsafe buildings and fire precautions do so. Husbands and wives murder each other without fear of legal punishment. The daily torture of tired nerves bring many a victim to the grave, and many thousands of boys and girls have murdered their mothers without knowing it. Domestic wars probably kill many more people than die from any other cause.

And in closing this book, ask yourselves if you are in anyway contributing to this result.

Banking Hints for Women

Every woman needs, and most of them have, some banking connection. They need the convenience of a checking account, a safe deposit box, and often a bank where they can borrow money upon some security they may have, to tide over a period, and often they should have a savings account where they can deposit money for a definite time pending its permanent investment.

At most banks there are four kinds of accounts:

1. Term Savings Account. This ordinarily draws 4% interest, compounded semi annually, and is not subject to check. Any sum can be deposited at any time. The bank may require six months notice of any withdrawal. Such an account is non-taxable. Pass book must be presented at the bank upon withdrawals.

2. Ordinary Savings Account. This usually draws 3% interest, compounded semi annually, and is not subject to check. Any sum may be deposited at any time, such an account is non-taxable. The bank may require 30 to 90 days notice of withdrawal and make payment only on presentation of pass book. This is a popular account with persons who have less than \$500.00 to deposit.

3. Special Savings Account. Drawing 3% interest, compounded monthly, and is subject to check without presentation of pass book. The interest is payable monthly on minimum balance if it is not less than \$500.00 during the calendar month. This requires 30 to 90 days notice of withdrawal. A good account for depositors who desire to hold money in reserve, or for future investment.

4. Checking or Commercial Account. It does not draw interest. Ordinarily requires an initial deposit of \$100.00. It is subject to check on demand. The law recognizes a paid check as a receipt for a bill. It is very convenient to pay gas, water and other household bills, and necessary to all persons engaged in business or conducting a home.

All accounts may be made joint accounts, where checks can be drawn by either husband or wife, mother or daughter, or any association of persons, and in the case of death, it may be made payable to the survivor.

Accounts can be opened in any of the above classes by parents or guardians for children.

Certificates of Deposit

Any person having a sum of money which they do not wish to keep in the house or in some insecure place may go to a bank and deposit it and receive a certificate of deposit. The depositor, when she takes the certificate of deposit, leaves her signature at the bank. The bank will not pay the money represented by the certificate to any person other than the depositor, or on her proper endorsement on the certificate of deposit. Interest bearing certificates of deposit can be obtained where money is left for a definite period.

Kind of Banks

1. **United States National Banks**—Chartered by the Federal Government and under close supervision of Federal Bank Examiners. These banks transact a general commercial business, have savings departments, and some have trust departments.

2. **State Banks**—Chartered by the State in which they are located and supervised by State Bank Examiners.

3. **Mutual Savings Bank**—Cooperative banks without stockholders, and depositors participate directly in the earning. They are under State supervision.

4. **Trust Companies**—Handle business of a trust nature, and assume trusts of most every kind.

5. **Postal Savings Banks**—Operated by the Federal Government through the Post Office.

OPENING A BANK ACCOUNT

There is nothing strange or complicated about opening a bank account. Go down to the bank and ask for the cashier having charge of new accounts, whom you will find to be a very pleasant and courteous gentleman or lady. In justice to the bank, start a Commercial or Checking account with money enough to make it worth while to the bank, as you must remember that when accounts are started, you have imposed upon it the keeping of accounts with you, which costs them money for clerk hire, etc. State what kind of an account you want to keep, and the cashier in charge will explain to you whatever you do not understand, and will suggest to you the opening of such class of account as your needs require. You should be prepared at this time to identify yourself, and you will be required to leave your signature with the bank on a card so that when you draw checks, the bank may compare the signatures on them with the signature you have left at the bank, so

that you cannot be impersonated by someone else. You should not be displeased when a bank requests you to be identified. It is as much for your safety as it is that of the bank. If you have not some ready means of identification at hand when you open the new account, the cashier will suggest to you some way of becoming identified, which will be without embarrassment to you.

When money is deposited in a bank, a deposit slip is made out for the cash and each check that is deposited, listed separately, and then added up for a total. It is impossible for the teller at a bank, in the rush of business, to take your money and checks that you have received and stop and make out a deposit slip, enumerating the money and the several checks to you that you may deposit. If he did, he would never get through with his business.

Checks

When an account is started at a bank, you will be provided with a book of checks, to each of which will be attached a stub. No checks should ever be drawn without filling out the corresponding stub, and all checks and stubs should be numbered. At the top of the stub is the space for writing your balance at the bank, and as each check is drawn, the amount should be deducted from the balance to form a new balance. In this way you will always know just what your balance is.

In drawing checks, care should be taken that the space where you write the figures should correspond with the line where you write the amount out in full.

On the line where the amount is written in full, you should begin to write as near the left-hand side as possible, so that a larger amount cannot be placed in front of the amount you write.

Every person should adopt and maintain a universal form of signature, to be used for all public purposes. A woman whose name is "Bertha M. Jones", whether she is married or single, should always sign her name "Bertha M. Jones." No woman should sign her name "Mrs. George E. Jones" to a check or business document. Every woman has an identity of her own. The titles "Mrs." or "Miss" are merely courtesy titles and form no part of a woman's name.

Checks should be written plainly so as to avoid delay and mistakes, and every person should write their signature as nearly uniform as possible. Checks should be written in ink and **never** in pencil. Checks should be dated the day they are written, as banks **must** refuse to cash checks which are dated beyond the day of presentation.

Should checks be signed so that the figures on the check and the amount written out vary, they will be returned by the bank to the person to whom the checks are given.

As it is now a criminal offense for any person to give to another a check upon a bank where the giver of the check has not sufficient funds for the bank to pay the check, great care must be taken in always knowing one's balance at the bank. Ignorance or carelessness or good intentions are no excuse for violating this law.

Never draw a check on a bank where your balance is not sufficient to meet it, expecting that some check that you have received, and which you intend to deposit in the bank, will be deposited by you before the check you have drawn will be presented to your bank. You may become ill, or be unable to go to your bank to deposit the check you have received before the check you have given will be presented for payment.

When you deposit a check that you have received from another with your bank, you should, before you draw against it, ascertain whether or not the check you have deposited has been collected by your bank, because your bank is not responsible for the amount of the check you have deposited until the bank has collected the same from the other bank upon which it is drawn. When a bank receives your check, it receives it for collection, and if such check is not honored by the bank upon which it is drawn, your bank will charge it to you, and deduct it from whatever balance you may have.

Do not write a check that will over-draw your account, depending upon the courtesy of the bank to carry for a few days your over-draft, as this is not permitted by the bank examiners, and you cannot expect your bank to be criticized by the examiners for doing an act that is not permitted by them. If you receive from another a check where the figures in one part are different from the written portion of the check, do not alter the check yourself, as the bank upon whom it is drawn will not pay it, but take the check back to the person who gave it to you and have a new one written in its place. Some times banks will cash a check for the smallest amount expressed upon it, but banks will not cash a check that has been altered, either as to dates, amounts, name of bank, or signature.

Safe Deposit Boxes

Women who have jewelry or valuables, instead of allowing them to remain carelessly in the house, or hiding them, should rent a safe deposit box for a small amount, and keep their jewelry and other valuables in such box, and thus preserve them from fire and theft. Never leave such things in an empty house, or in your home when you are going away for

a journey and leave some servant or caretaker in charge. Many millions every year in the United States are lost by reason of this carelessness.

Exchange

When traveling do not carry with you large sums of money, thus inviting a robbery, but go to your bank, and procure drafts or traveler's checks. These drafts, or traveler's checks will be of no value in the hands of another should you lose them or have them stolen from you. Banks will, for a small premium or fee, sell you such drafts or traveler's checks, payable practically any where in the world. If you lose them or they are stolen from you, you can, ordinarily, have payment upon them stopped, and upon furnishing to the bank a proper bond or surety, duplicates will be issued for them.

When desiring to send money to a person in another town than the one you live in, send a draft on some bank in the place in which the other person lives. Such draft can be purchased for a small fee (called exchange) from your bank. Never send loose money in a letter, as the mail is not responsible for its loss unless the letter is registered, and that usually costs more than the exchange.

Bank Statements

Call at your bank about the first of each month if you have drawn any checks during the preceeding month, for a bank statement. This statement will show the amount of your deposits and the checks that you have drawn during the previous month. Upon receiving the statement you should carefully inspect it to see that your cancelled checks (your checks that the bank has paid) have been paid as you wrote them, and see if the balance that the bank gives is the same balance that you have determined from your stubs. Should you find any discrepancies, report the same immediately to the bank, so that it may have an opportunity of correcting any errors. If you do not promptly report any errors you find, the bank will not, legally, be responsible for any alterations of your checks or any forgeries of your name.

Miscellaneous

If you borrow money from a bank on your note pay your interest promptly, and save the bank the trouble of sending you notices, and thus keep a good name with the bank.

If you hold a note from another and wish to avoid the trouble of collecting on it, you can leave the note with your

bank, which will, for a small fee, take this trouble off your hands. This is an especially convenient service if you are leaving town for a period, and collections should be made for you during your absence. The bank can make your collections, and send the money collected, in the shape of a draft, to you, wherever you may be.

Banking by Mail.

Banking may be done by mail. If you live some distance from your bank, or you are temporarily out of town, and you wish to deposit some money or some checks that you have received, they can be sent to your bank by mail and with a short letter of transmittal. If your letter contains money it should be insured at the post office where you deposit the letter. If it contains only checks payable to yourself, you can write across the back of the checks "Pay to the order of (your) Bank" and write your name beneath, the same as it appears in the body of the check. This makes the checks payable only to the bank where you wish to deposit them to your credit, and the letter need not be insured. When requested the bank will acknowledge receipt of the money or checks.

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